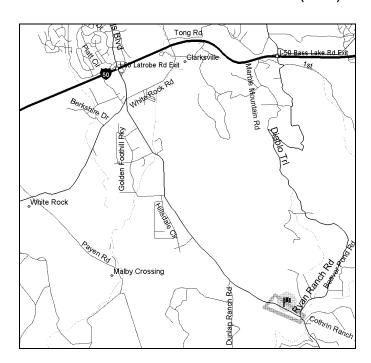
COUNTY OF EL DORADO, CALIFORNIA DEPARTMENT OF TRANSPORTATION

CONTRACT DOCUMENTS

INCLUDING
NOTICE TO BIDDERS, SPECIAL PROVISIONS,
PROPOSAL, AND AGREEMENT
FOR

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS

CONTRACT NO. 5415 / CIP NO. 72195 FEDERAL AID NO. HSIPL - 5925(171)



FOR USE WITH STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, 2018 STANDARD SPECIFICATIONS AND STANDARD PLANS

BID OPENING DATE: June 4, 2021

COUNTY OF EL DORADO, CALIFORNIA DEPARTMENT OF TRANSPORTATION

CONTRACT DOCUMENTS

INCLUDING
NOTICE TO BIDDERS, SPECIAL PROVISIONS,
PROPOSAL, AND CONTRACT
FOR

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS

MAY 11, 2021

CONTRACT NO. 5415 / CIP NO. 72195 FEDERAL AID NO. HSIPL - 5925(171)

The various portions of the Contract Documents have been prepared under the direction of the following licensed Civil Engineer, in accordance with California Business and Professions Code § 6735.

Zachary Oates, RCE No. C84705 Date 4/14/2021 No. C84705

County of El Dorado, State of California Department of Transportation

Road Safety Improvements at Various Locations Contract No. 5415 / CIP No. 72195

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COUNTY OF EL DORADO, CALIFORNIA DEPARTMENT OF TRANSPORTATION

NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN by the County of El Dorado, State of California, that sealed bids for Work in accordance with the Project Plans (Plans) and Contract Documents designated:

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS CIP NO. 72195, CONTRACT No. 5415

Will be received by the County of El Dorado, Department of Transportation, through Quest Construction Data Network (Quest), until **June 4, 2021 at 2:00 PM,** at which time bids will be publicly opened and read by the Department of Transportation. The bid opening will be held virtually through Zoom. The virtual meeting can be accessed via the following: https://zoom.us/j/93641196165 (669)900-9128 US (San Jose), (253)215-8782 US (Tacoma), (346)248-7799 US (Houston).

No Bid may be withdrawn after the time established for receiving bids or before the award and execution of the Contract, unless the award is delayed for a period exceeding sixty (60) calendar days. Bids must be executed in accordance with the instructions given and forms provided in the Contract Documents furnished by the County of El Dorado, Department of Transportation through Quest. **The Proposal including the Bidder's Security, Form 590, and Payee Data Record shall be submitted through Quest**.

LOCATION/DESCRIPTION OF THE WORK: The Project is located along various roads, in in the County of El Dorado. The Work to be done is shown on the Plans, and generally consists of, but is not limited to:

- A. Removal of existing pavement striping and markers; installation of high friction surface treatment, new enhanced wet-night thermoplastic striping, raised pavement markers, and advanced warning signs. Other items or details not mentioned above, that are required by the plans, Standard Plans, Standard Specifications, or these Special Provisions must be performed, constructed or installed.
- B. Bids are required for the entire Work described herein.
- C. The Contract time is THIRTY-FIVE (35) WORKING DAYS.
- D. For bonding purposes the anticipated Project cost is less than \$1,200,000.
- E. A pre-bid meeting is scheduled for this Project on <u>May 26, 2021 at 2:00 p.m.</u> at the County of El Dorado Community Development Services, Department of Transportation, 2441 Headington Road, Placerville, CA. The meeting will be held in the downstairs conference room. Attendance at the pre-bid meeting is not mandatory.
- F. This Project is being formally bid in accordance with Public Contract Code 22032 and County of El Dorado Ordinance Code section 3.14.040.

OBTAINING OR VIEWING CONTRACT DOCUMENTS: The Contract Documents, including the Project Plans, may be viewed and/or downloaded from the Quest website at http://www.questcdn.com. Interested parties may also access the Quest website by clicking on the link next to the Project Name or entering the Quest Project # on the Department of Transportation's website at http://www.edcgov.us/Government/DOT/pages/BidsHome.aspx.

Interested parties may view the Contract Documents, including the Project Plans, through the Department of Transportations' website at no charge. The digital Contract Documents, including the Project Plans, may be downloaded for \$30.00 by inputting the Quest Project # 7600533 on the websites' Project Search page. Please contact QuestCDN.com at (952) 233-1632 or info@questcdn.com for assistance in free membership, registration,

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downloading, and working with this digital project information. To access the electronic bid form, download the project/request documents and click the online bidding button at the top of the advertisement screen.

To be included on the planholders list, receive notification of addenda, and to be eligible to bid interested parties must pay for and download the Contract Documents, including the Project Plans, from Quest. Those downloading the Contract Documents, including the Project Plans, assume responsibility and risk for completeness of the downloaded Contract Documents.

The Contract Documents, including the Project Plans, may be examined in person at the Department of Transportation's office at 2850 Fairlane Court, Placerville CA. However, the Department of Transportation will no longer sell paper copies of the Contract Documents.

The following Supplemental Project Information/Information Handout will be provided in pdf format as part of the Contract Documents on Quest's website to all planholders who acquire the Contract Documents digitally through Quest:

Standard Plan List

CONTRACTORS LICENSE CLASSIFICATION: Bidders must be properly licensed to perform the Work pursuant to the Contractors' State License Law (Business and Professions Code Section 7000 et seq.) and must possess a **CLASS A** license or equivalent combination of Classes required by the categories and type of Work included in the Contract Documents and Plans at the time the Contract is awarded, and must maintain a valid license through completion and acceptance of the Work, including the guarantee and acceptance period. Failure of the successful Bidder to obtain proper adequate licensing will constitute a failure to execute the Contract and will result in the forfeiture of the Bidder's security.

BUSINESS LICENSE: The County Business License Ordinance provides that it is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of the County of El Dorado without possessing a County business license unless exempt under County Ordinance Code Section 5.08.070. The Bidder to whom an award is made must comply with all of the requirements of the County Business License Ordinance, where applicable, prior to beginning Work under this Contract and at all times during the term of this Contract.

CONTRACTOR REGISTRATION: No contractor or subcontractor may bid on any public works project, be listed in a bid proposal for any public works project, or engage in the performance of any contract for public work unless registered with the Department of Industrial Relations pursuant to Labor Code sections 1725.5 and 1771.1.

An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the requirements of Labor Code section 1771.1 are met.

SUBCONTRACTOR LIST: Each Proposal must have listed therein the name, contractor's license number, DIR number, and address of each subcontractor to whom the bidder proposes to subcontract portions of the Work in an amount in excess of 0.5% of the total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The Bidder must also describe in the Subcontractor List the Work to be performed by each subcontractor listed. The Work to be performed by the subcontractor must be shown by listing the bid item number, bid item description, and portion of the Work to be performed by the subcontractor in the form of a percentage (not to exceed 100%) calculated by dividing the Work to be performed by the subcontractor by the respective bid item amount(s) (not by the total bid price).

The percentage of each bid item subcontracted may be submitted with the Bidder's bid or sent via email or fax to Brian Franklin, County of El Dorado Community Development Services, Department of Transportation, email-Brian.Franklin@edcgov.us, Fax-(530) 698-5813 by 4:00 p.m. on the first business day after the bid opening. The email or fax must contain the name of each subcontractor submitted with the Bidder's bid along with the bid item

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number, the bid item description, and the percentage of each bid item subcontracted, as described above. At the time the contract is awarded, all listed subcontractors must be properly licensed to perform their designated portion of the Work. The Bidder's attention is directed to other provisions of the Act related to the imposition of penalties for failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

An inadvertent error in listing the California Contractor license number on the Subcontractor List will not be grounds for filing a bid protest or grounds for considering the bid non-responsive if the Bidder submits the corrected contractor's license number to Brian Franklin via fax or email as noted above within 24 hours after the bid opening, provided the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

BUY AMERICA: This Project is subject to the "Buy America" provisions of the Surface Transportation Assistance Act of 1982, as amended by the Intermodal Surface Transportation Efficiency Act of 1991, and the Moving Ahead for Progress in the 21st Century Act (MAP-21).

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION: For Federal-aid projects, DBE requirements of Title 49 Part 26 of the Code of Federal Regulations (49 CFR 26) apply. Bidders are advised that, as required by Federal law, the County of El Dorado has implemented Disadvantaged Business Enterprise requirements for Disadvantaged Business Enterprises (DBE). Comply with Section 2-1.12 and Section 5-1.13.

In accordance with 49 CFR 26, Bidder will take all necessary affirmative steps to assure that minority firms, women's business enterprises and labor surplus area firms are used when possible.

The Disadvantaged Business Enterprise (DBE) Contract goal is 8.00%.

The UDBE Good Faith Effort Submittal Information Handout and the County of El Dorado DBE Training Presentation is available at http://www.edcgov.us/Government/DOT/pages/DBE.aspx. The problems and solutions listed in the Handout apply to DBE Good Faith Efforts Submittals.

EMISSIONS REDUCTION: Contractor shall comply with emission reduction regulations mandated by the California Air Resources Board, sign the certification of knowledge in the Agreement, and provide County a Certificate of Reported Compliance when road legal diesel vehicles with a gross vehicle weight over 14,000 pounds are included in their fleet. Contractor must require all sub-contractors to comply with such regulations and provide County a Certificate of Reported Compliance for each sub-contractor with road legal diesel vehicles over 14,000 pound gross vehicle weight.

NONDISCRIMINATION: Comply with Chapter 5 of Division 4 of Title 2, California Code of Regulations and the following.

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOVERNMENT CODE SECTION 12990)

Comply with Section 7-1.02l(2), "Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt State contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The specifications are applicable to all nonexempt State construction contracts and subcontracts of \$5,000 or more.

Comply with the additional nondiscrimination and fair employment practices provisions in the *Draft Agreement* contained in these Contract Documents that will apply to this Federal-aid Contract.

The Department of Transportation hereby notifies all Bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex,

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national origin, religion, age, or disability in consideration for the award.

PREVAILING WAGE REQUIREMENTS: In accordance with the provisions of California Labor Code Sections 1770 et seq., including but not limited to Sections 1773, 1773.1, 1773.2, 1773.6, and 1773.7, the general prevailing rate of wages in the county in which the Work is to be done has been determined by the Director of the California Department of Industrial Relations. Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, PO Box 420603, San Francisco CA 94142-0603, Telephone (415) 703-4708 or by referring to the website at http://www.dir.ca.gov/OPRL/PWD. The rates at the time of the bid advertisement date of a project will remain in effect for the life of the project in accordance with the California Code of Regulations, as modified and effective January 27, 1997.

Copies of the general prevailing rate of wages in the county in which the Work is to be done are also on file at the Department of Transportation's principal office, and are available upon request, and in case of projects involving Federal funds, Federal wage requirements as predetermined by the United States Secretary of Labor have been included in the Contract Documents. Addenda to modify the Federal minimum wage rates, if necessary, will be issued as described in the Project Administration section of this Notice to Bidders.

In accordance with the provisions of Labor Code 1810, eight (8) hours of labor constitutes a legal day's work upon all work done hereunder, and Contractor and any subcontractor employed under this Contract must conform to and be bound by the provisions of Labor Code Sections 1810 through 1815.

This Project is subject to the requirements of Title 8, Chapter 8, Subchapter 4.5 of the California Code of Regulations including the obligation to furnish certified payroll records directly to the Compliance Monitoring Unit under the Labor Commissioner within the Department of Industrial Relations Division of Labor Standards Enforcement in accordance with Section 16461.

In the case of Federally funded projects, where Federal and State prevailing wage requirements apply, compliance with both is required. This Project is funded in whole or part by Federal funds. Comply with Exhibit D of the Draft Agreement and the Copeland Act (18 U.S.C. 874 and 29 CFR Part 3), the Davis-Bacon Act (40 U.S.C. 3141-3147 and 29 CFR Part 5), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 and 29 CFR Part 5).

If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, Contractor and subcontractors must pay not less than the higher wage rate. The Department of Transportation will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by Contractor and subcontractors, Contractor and subcontractors must pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

TRAINING: For the Federal training program, the number of trainees or apprentices is zero (0).

BID SECURITY: A bid security must be provided with each bid. Bid security must be in an amount of not less than ten percent (10%) of the total amount of the Bid for bid and must be cash, a certified check or cashier's check drawn to the order of the County of El Dorado or a Bidder's Bond executed by a surety satisfactory to the County of El Dorado on the form provided in the Proposal section of these Contract Documents.

Bidders are required to submit either an electronic Bidder's Bond through Surety2000 or a PDF copy of a hard copy Bidder's Bond with their bid. If a bid security other than a Bidder's Bond is being used, Bidders must upload a PDF copy of the bid security with their electronic bid submittal. If a PDF copy of the bid security is uploaded, the original bid security must be provided to the Department of Transportation after the bid opening but before the end of business on the first business day after the bid opening. If Bidder chooses to utilize Surety2000, by submitting their bid, Bidder hereby agrees to hold the County of El Dorado harmless from and waive any and all

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claims against the County of El Dorado for any claims or damages that arise from or are related to the Bidder's use of Surety2000.

BID PROTEST PROCEDURE: The protest procedure is intended to handle and resolve disputes related to the bid award for this Project pursuant to Title 2 Code of Federal Regulations Part 200.318(k) and County of El Dorado policies and procedures. A protestor must exhaust all administrative remedies with the County of El Dorado before pursuing a protest with a Federal Agency. Reviews of protests by the Federal agency will be limited to:

- Violations of Federal law or regulations and the standards of 2 CFR Part 200.318(k). Violations of State
 of California or local law will be under the jurisdiction of the State of California or the County of El Dorado;
 and
- 2. Violation of the County of El Dorado's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to the County of El Dorado.

The protest procedure is an extension of the formal bid process and allows those who wish to protest the recommendation of an award after bid the opportunity to be heard.

Policy: Upon completion of the bid evaluation, the Department of Transportation will notify all bidders of the recommendation of award, the basis therefore, and the date and time on which the recommendation for award will be considered and acted upon by the Board of Supervisors. All bidders may attend the Board of Supervisors meeting at the time the agenda item is considered, address the Board of Supervisors, and be heard.

Procedure: If a bidder wishes to protest the award, this is the procedure:

- 1. The Department of Transportation will review the bids received in a timely fashion under the terms and conditions of the Notice to Bidders, and notify the bidders in writing, at the fax number designated in the Proposal, of its recommendation including for award or rejection of bids ("All Bidders Letter").
- 2. Within five (5) business days from the date of the "All Bidders Letter," the Bidder protesting the recommendation for award must submit a letter of protest to and must be received by the County of El Dorado, Department of Transportation, Attention Brian Franklin, 2850 Fairlane Court, Placerville, CA 95667, and state in detail the basis and reasons for the protest. The Bidder must provide facts to support the protest, including any evidence it wishes to be considered, together with the law, rule, regulation, or criteria on which the protest is based.
- 3. If the Department of Transportation finds the protest to be valid, it may modify its award recommendations and notify all bidders of that decision. If the Department of Transportation does not agree with the protest, or otherwise fails to resolve the protest, it will notify the bid protestor and all interested parties of its decision and the date and time that the recommendation for award will be agendized for the Board of Supervisors' consideration and action. The Department of Transportation will also include in its report to the Board of Supervisors the details of the bid protest.
- 4. The Bidder may attend the Board of Supervisors meeting at which the recommendation and bid protest will be considered. The Board of Supervisors will take comment from the Bidder, staff, and members of the public who wish to speak on the item. In the event that the Bidder is not in attendance at that time, the bid protest may be dismissed by the Board of Supervisors without further consideration of the merits; and

The decision of the Board of Supervisors on the bid protest will be final.

AWARD OF CONTRACT: Bids will be considered for award by the Board of Supervisors. The County of El Dorado reserves the right after opening bids to reject any or all bids, to waive any irregularity in a bid, or to make award to the lowest responsive, responsible Bidder and reject all other bids, as it may best serve the interests of

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195
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the County.

As a condition of award, the successful Bidder will be required to submit bonds and evidence of insurance prior to execution of the Agreement by the County. Failure to meet this requirement constitutes abandonment of the Bid by the Bidder and forfeiture of the Bidder's security. Award will then be made to the next lowest, responsive, responsible Bidder.

The Office Engineer must receive all required documents within ten (10) business days of the date of the Notice of Award of Contract letter.

RETAINAGE FROM PAYMENTS: The Contractor may elect to receive one hundred percent (100%) of payments due under the Contract from time to time, without retention of any portion of the payment by the County, by depositing securities of equivalent value with the County in accordance with the provisions of Section 22300 of the Public Contract Code. Securities eligible for deposit hereunder are be limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

PROJECT ADMINISTRATION: Submit all Requests for Information (RFI) during the bid period to the email shown on the Quest website under the Quest # 7600533 "Project Q&A". If the response does not require an addendum, a response will be posted as a response to bidder's inquiry on the Quest website under "Project Q&A". It is the bidders' responsibility to check this website under "Project Q&A" for responses to bidders' inquiries during the bid period. Addenda will be uploaded in pdf format to Quest's website and Quest will issue an automatic email notification to all planholders that have acquired the Contract Documents digitally through Quest. The list of planholders will be available on Quest's website under "View Planholders".

No oral responses to any questions concerning the content of the Contract Documents will be given. All responses will be in the form of written addenda to the Contract Documents or written responses to bidders' inquiries. Responses to bidders' inquiries and addenda will be posted on the Quest website as described above.

Inquiries or questions based on alleged patent ambiguity of the plans, specifications, or estimate must be communicated as a bidder inquiry prior to bid opening. These inquiries or questions, submitted after bid opening will not be treated as a bid protest.

BY ORDER OF the Director of the Department of Transportation, County of El Dorado, State of California.

Authorized by the Board of Supervisors on May 11, 2021, at Placerville, California.

Ву		
	Rafael Martinez, Director	_
	Department of Transportation	

ORGANIZATION

Special provisions are under headings that correspond with the main-section headings of the *Standard Specifications*. A main-section heading is a heading shown in the table of contents of the *Standard Specifications*.

Each special provision begins with a revision clause that describes or introduces a revision to the *Standard Specifications* as revised by any revised standard specification.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the *Standard Specifications* for any other reference to a paragraph of the *Standard Specifications*.

STANDARD PLANS LIST

The standard plan sheets applicable to this Contract include those listed below. The applicable revised standard plans (RSPs) listed below are included in the supplemental project information.

ABBREVIATIONS, LINES, SYMBOLS, AND LEGEND			
A3A	Abbreviations (Sheet 1 of 3)		
A3B	Abbreviations (Sheet 2 of 3)		
A3C	Abbreviations (Sheet 3 of 3)		
A10A	Legend – Lines and Symbols (Sheet 1 of 5)		
A10B	Legend – Lines and Symbols (Sheet 2 of 5)		
A10C	Legend – Lines and Symbols (Sheet 3 of 5)		
A10D	Legend – Lines and Symbols (Sheet 4 of 5)		
A10E	Legend – Lines and Symbols (Sheet 5 of 5)		
PAVEMENT MARKERS, TRAFFIC LINES, AND PAVEMENT MARKINGS			
A20A	Pavement Markers and Traffic Lines – Typical Details		
A20B	Pavement Markers and Traffic Lines – Typical Details		
A20C	Pavement Markers and Traffic Lines – Typical Details		
A20D	Pavement Markers and Traffic Lines – Typical Details		
A24A	Pavement Markings - Arrows		
ROADSIDE SIGNS			
RS1	Roadside Signs – Typical Installation Details No. 1		
RS2	Roadside Signs – Wood Post – Typical Installation Details No. 2		
RS4	Roadside Signs – Typical Installation Details No. 4		

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DIVISION I GENERAL PROVISIONS 1 GENERAL

Add to section 1-1.01: Nonstandard Bid Items and Applicable Sections

Item Code	Item Description	Applicable Section	
120149A	TEMPORARY PAVEMENT DELINEATION	12	
128651A	PORTABLE CHANGEABLE MESSAGE SIGN	12	
149001A	PREPARE FUGITIVE DUST CONTROL	14	
380001A	HIGH-FRICTION SURFACE TREATMENT (HFST)	38	
840502A	4" THERMOPLASTIC TRAFFIC STRIPE	84	
	(ENHANCED WE NIGHT VISIBILITY)		
840502B	8" THERMOPLASTIC TRAFFIC STRIPE	84	
	(ENHANCED WET NIGHT VISIBILITY)		

Add to the table in section 1-1.06:

Abbreviation	Meaning
CVIN	Central Valley Independent Network, LLC
HFST	High Friction Surface Treatment
EID	El Dorado Irrigation District
SWD	Sign Working Day
USPS	United States Postal Service

Replace the corresponding definitions in section 1-1.07B with:

- **Bid Item List:** List of bid items and the associated quantities. The Proposal Pay Items and Bid Price Schedule in the Proposal section is the Bid Item List. The verified Bid Item List is Exhibit A Contractor's Bid and Bid Price Schedule in the fully-executed contract for the project.
- **Contract acceptance:** County Clerk/Recorder's recordation of the executed written Notice of Acceptance of a completed Contract.
- **Department or Department of Transportation:** The Department of Transportation in the County of El Dorado or Department of Transportation as defined in St & Hwy Code § 20 and authorized in St & Hwy Code § 90; its authorized representatives.
- **Engineer:** The Director of Transportation for County of El Dorado, or authorized representative (Resident Engineer) responsible for the Contract's administration; the Resident Engineer's authorized representatives.
- **Federal-aid contract:** Contract that has a federal-aid project number on the cover of the book titled Contract Documents.
- Informal-bid contract: Contract that is noted as informally bid in the Notice to Bidders.
- 2. revised standard specifications: New or revised standard specifications. These specifications are in a section titled *Revised Standard Specifications* of a book titled *Contract Documents including Notice to Bidders, Special Provisions, Proposal, and Contract.*
- **3. special provisions:** Specifications specific to the project. These specifications are in a section titled Special Provisions of a book titled Contract Documents including Notice to Bidders, Special Provisions, Proposal, and Contract.

State: The State of California, including its agencies, departments, or divisions, whose conduct or action is related to the work, or County of El Dorado, a political subdivision of the State, and Department of Transportation

Structure Design: The Department of Transportation for County of El Dorado or Offices of Structure Design of the Department of Transportation.

Add to section 1-1.07B:

Contract approval: Execution of the Contract by the County of El Dorado.

Contract award package: The Notice of Award of Contract letter, two originals of the Agreement, Payment and Performance bond forms, and other forms the successful Bidder must complete for Contract Execution.

Contract Documents: See Article 2 "Contract Documents" of the Draft Agreement.

County: County of El Dorado, a political subdivision of the State of California.

Laboratory: The established laboratory of the County of El Dorado Department of Transportation or laboratories authorized by the Engineer to test materials and work involved in the contract.

Meeting: includes a meeting in which some or all of the participants are not physically present buttake part by electronic communications such as telephone, closed-circuit television, Internet text, audio, or other audiovisual means.

Office Engineer: The Office Engineer in the County of El Dorado Department of Transportation or, depending on context, Caltrans Office Engineer

Proposal: The Proposal section of the Contract Documents book or the Bidder's bid.

Signature: includes an electronic or digital signature.

Delete "estimated cost" in section 1-1.07B.

Add to section 1-1.09:

The following Project locations are in a freeze-thaw area.

Project Location	Description	
3	Cedar Ravine Rd at Elysian Way	
5	Sly Park Rd at Mayflower Rd	
6	Forni Rd at Wamego Rd	
10	Bucks Bar Rd at Palace Ln	
12	Cedar Ravine Rd at Camp Nauvoo Rd	

Add to section 1-1.11:

Reference or agency or department unit	Web site	Address	Telephone no.
County of El Dorado Department of Transportation	http://www.edcgov.us/Government/DOT/	2850 Fairlane Court Placerville, CA 95667	(530) 621-5900
County of El Dorado Department of Transportation Office Engineer	https://www.edcgov.us/government/dot/ pages/BidsHome.aspx	2850 Fairlane Court Placerville, CA 95667	(530) 621-5311

Replace section 1-1.12 with:

Make checks payable to County of El Dorado. Use the bond forms provided in the book titled *Contract Documents including Notice to Bidders, Special Provisions, Proposal, and Agreement.*

^^^^^

2 BIDDING

Replace section 2-1.06A with:

The Contract Documents book and project plans may be viewed by subscribers at:

- 1. Sacramento Regional Builders Exchange at www.srbx.org
- 2. Placer County Contractors Association & Builders Exchange at www.placerbx.com
- 3. Dodge Data and Analytics at www.construction.com
- 4. Construction Bid Board at www.ebidboard.com
- 5. ConstructConnect at www.constructconnect.com
- 6. Quest Construction Data Network's website as described in the Notice to Bidders

The Notice to Bidders can be viewed at http://www.edcgov.us/Government/DOT//pages/BidsHome.aspx.

The *Notice to Bidders* includes how and where to obtain the Contract Documents book, the project Plans, and the Supplemental Project Information.

The Contract Documents book includes the *Notice to Bidders, Revised Standard Specifications, Special Provisions, Proposal, and Contract.*

Replace the 3rd paragraph of section 2-1.06B with:

If an *Informational Handout* or cross sections are available you may view and/or download them at as described in the *Notice to Bidders*.

Add to section 2-1.06B:

Availability of and requests for rock cores, other supplemental project information, and bridge as-built drawings described in this section apply only to projects on the State Highway System.

Replace "RESERVED" in section 2-1.08 with:

Section 2-1.08 applies to a federal-aid contract.

Under 31 USC § 1352:

None of the funds appropriated by any Act may be expended by the recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

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If any funds other than Federal funds have been paid for the same purposes in connection with this Federal-aid contract, submit an executed certification and, if required, submit a completed disclosure form as part your Proposal.

A certification for Federal-aid contracts regarding payment of funds to lobby Congress or a Federal agency is included in the Proposal. Standard Form - LLL, "Disclosure of Lobbying Activities," with instructions for completion of the Standard Form is also included in the Proposal. Signing the Proposal constitutes signature of the Certification.

The certification and disclosure of lobbying activities must be included in each subcontract and any lowertier contracts exceeding \$100,000. Submit all disclosure forms regardless of tier, but not certifications.

You, your subcontractors, and any lower-tier contractors must file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form you, your subcontractors, and any lower-tier contractors previously filed. An event that materially affects the accuracy of the information reported includes:

- A. A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- B. A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or,
- C. A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

Replace "Bid Item List" in section 2-1.09 with:

Proposal Pay Items and Bid Price Schedule.

Replace the 2nd paragraph in section 2-1.10 with:

The Subcontractor List in the Proposal must show the name, contractor's license number, DIR registration number, address, and work portions to be performed by each subcontractor listed. The work portion to be performed must be shown by listing the bid item number, bid item description, and portion of the work to be performed by the subcontractor in the form of a percentage (not to exceed 100%) calculated by dividing the work to be performed by the subcontractor by the respective bid item amount(s) (not by the total bid price).

An inadvertent error in listing the California Contractor license number on the Subcontractor List will not be grounds for filing a bid protest or grounds for considering the bid non-responsive if the Bidder submits the corrected contractor's license number to Brian Franklin via fax (530) 698-5813 or email Brian.Franklin@edcgov.us within 24 hours of it being requested by the Department, provided the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

Add to section 2-1.12B(1):

The Contractor must also carry out applicable requirements of 2 CFR Part 200.321 in the award and administration of this UNITED STATED DEPARTMENT OF TRANSPORTATION (USDOT)-assisted Contract. The applicable requirements of 2 CFR Part 200.321 are as follows:

- 1. Contracting with small and minority firms, women's business enterprise and labor surplus area firms.
 - a. Contractor will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.
 - b. Affirmative steps must include:

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- i. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- ii. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- iii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
- iv. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;
- v. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
- vi. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (a)(2) (i) through (v) of this section.

The County encourages the Bidder to take affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when opportunities exist.

Add to section 2-1.12B(2):

Bidders other than the apparent low bidder, the 2nd low bidder, and the 3rd low bidder are not required to submit the DBE commitment form unless the Department requests it. If the Department requests a DBE commitment form from you, submit the completed form within 5 business days of the request via email or fax to Office Engineer, email Brian.Franklin@edcgov.us, Fax (530) 698-5813.

Add to section 2-1.12B(3):

As provided in 49 CFR 26.53(d) if the Department determines that the apparent successful Bidder failed to meet the Good Faith Effort requirements, the Department will provide the apparent successful low Bidder an opportunity for administrative reconsideration before awarding the Contract. The Department will provide the apparent successful low Bidder an opportunity to submit written documentation or argument and meet in person with the reconsideration official concerning the issue of whether it met the goal or made adequate good faith efforts to do so. The reconsideration official is someone who did not participate in the original determination that the goal or good faith effort was not met.

Replace section 2-1.15 "DISABLED VETERAN BUSINESS ENTERPRISES" with:

2-1.15 RESERVED

Replace section 2-1.18 "SMALL BUSINESS AND NON-SMALL BUSINESS SUBCONTRACTOR PREFERENCES" with:

2-1.18 RESERVED

Replace section 2-1.27 "CALIFORNIA COMPANIES" with:

2-1.27 RESERVED

Replace section 2-1.33 with:

Except as noted below, complete all pages of the Proposal in the Contract Documents book and submit the completed Proposal, Payee Data Record, and CA 590 Form with the Bidder's Security as noted in the *Notice to Bidders*.

Submit the forms from the Proposal and form information at the times shown in the following table:

Contract type	Forms to be submitted at the time of bid	Forms to be submitted and received no later than 4:00 p.m. on the 1 st business day after bid opening ^b	Forms to be submitted and received within 24 hours of being requested by Department ^b	Forms to be submitted and received no later than 4:00 p.m. on the 5th business day after bid opening ^a
All Contracts	All Proposal forms including Business name and address; bid item number and bid item description of subcontracted work on the Subcontractor List	Subcontractor name, bid item number, bid item number, bid item description shown on the Subcontractor List submitted with Proposal, and the percentage of each bid item ^b	Correction for incorrect Contractor License # on Subcontractor List submitted with Proposal ^b	-
Federal-aid Contracts Only				 Local Agency Bidder - DBE – Commitment (Exhibit 15-G) ° DBE Information - Good Faith Efforts (Exhibit 15-H) and Documentation°

^aThe percentage of each bid item and the 15-G and 15-H forms may be submitted at the time of bid.

Failure to submit the forms and information as specified results in a nonresponsive bid.

If an agent other than the authorized corporation officer or a partnership member signs the bid, submit a Power of Attorney authorizing the agent to sign on behalf of the principal with the bid. Otherwise, the bid may be disregarded as irregular or unauthorized.

Replace the 4th item of the 1st paragraph of section 2-1.34 with:

(a) Bidder's bond signed by an authorized representative of a surety insurer who is licensed in California. The authorized representative's signature must be notarized and authorization documentation must be provided.

Delete the 5th item of the 1st paragraph and the 3rd paragraph of section 2-1.34.

Replace the last paragraph of section 2-1.34 with:

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blf the information is not submitted at the time of bid email or fax to Office Engineer, email-Brian.Franklin@edcgov.us, Fax-(530) 698-5813. This after-bid submittal does not apply to an informal-bid contract. For an informal bid contract, submit the completed form at the time of bid.

^cIf not submitted at the time of bid, applicable only to the apparent low bidder, 2nd low bidder, and 3rd low bidder. Submit via email or fax to Office Engineer, email-<u>Brian.Franklin@edcgov.us</u>, Fax-(530) 698-5813.

If using a bidders bond, you must complete the Bidder's bond form included in in the Contract Documents following the Proposal and submit it with your proposal.

Replace "Reserved" in section 2-1.44 with:

2-1.44 BID PROTEST PROCEDURE

The protest procedure is intended to handle and resolve disputes related to the bid award for this project pursuant to Title 2 Code of Federal Regulations Part 200.318(k) and County policies and procedures. A protestor must exhaust all administrative remedies with County before pursuing a protest with a Federal Agency. Reviews of protests by the Federal agency will be limited to:

- 1. Violations of Federal law or regulations and the standards of 2 CFR Part 200.318(k). Violations of State of California or local law will be under the jurisdiction of the State or County; and
- 2. Violation of County's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to County.

The protest procedure is an extension of the formal bid process and allows those who wish to protest the recommendation of an award after bid the opportunity to be heard.

Policy: Upon completion of the bid evaluation, the Department will notify all bidders of the recommendation of award, the basis therefore, and the date and time on which the recommendation for award will be considered and acted upon by the Board of Supervisors. All bidders may attend the Board of Supervisors meeting at the time the agenda item is considered, address the Board of Supervisors, and be heard.

Procedure: If you wish to protest the award, this is the procedure:

- 1. The Department will review the bids received in a timely fashion under the terms and conditions of the *Notice to Bidders*, and notify you in writing, at the fax number designated in the Proposal, of its recommendation including for award or rejection of bids ("All Bidders Letter").
- 2. Within five (5) business days from the date of the "All Bidders Letter," the Bidder protesting the recommendation for award must submit a letter of protest to and must be received by Office Engineer, Attention Brian Franklin, and state in detail the basis and reasons for the protest. The Bidder must provide facts to support the protest, including any evidence it wishes to be considered, together with the law, rule, regulation, or criteria on which the protest is based.
- 3. If the Department finds the protest to be valid, it may modify its award recommendations and notify all bidders of that decision. If the Department does not agree with the protest, or otherwise fails to resolve the protest, the Department will notify the bid protestor and all interested parties of its decision and the date and time that the recommendation for award will be agendized for the Board of Supervisors' consideration and action. The Department will also include in its report to the Board of Supervisors the details of the bid protest.
- 4. The Bidder may attend the Board of Supervisors meeting at which the recommendation and bid protest will be considered. The Board of Supervisors will take comment from the Bidder, staff, and members of the public who wish to speak on the item. If the Bidder is not in attendance at that time, the bid protest may be dismissed by the Board of Supervisors without further consideration of the merits; and

The decision of the Board of Supervisors on the bid protest will be final.

Replace the 1st sentence in section 2-1.46 with:

County Board of Supervisors' decision on the bid award is final.

Replace the 1st sentence in the 2nd paragraph section 2-1.46 with:

County Board of Supervisors may reject:

Replace section 2-1.47 with:

2-1.47 BID RELIEF

County Board of Supervisors may grant bid relief under Pub Cont Code § 5100 et seq. Submit any request for bid relief to Office Engineer, email-Brian.Franklin@edcgov.us, Fax-(530) 698-5813. Requests for bid relief must be in writing within 2 business day of the bid opening and must demonstrate:

- 1. A mistake was made in your bid.
- The mistake made the bid materially different than what you intended.
 The mistake was made in filling out the bid and not due to an error in judgment or to carelessness in inspecting the site of work or in reading the plans or specifications.

Delete section 2-1.49.

^^^^^

3 CONTRACT AWARD AND EXECUTION

Delete items 1 and 2 of section 3-1.02B.

Replace section 3-1.04 with:

County Board of Supervisors will consider bids for award. County reserves the right after opening bids to reject any or all bids, to waive any irregularity in a bid, or to make award to the lowest responsive, responsible Bidder and reject all other bids, as it may best serve the interests of County. The award of the Contract, if it be awarded, will be to the lowest, responsive, responsible Bidder who's Proposal complies with all the requirements prescribed. This award, if made, will be made within sixty (60) days after the opening of the bids. This period will be subject to extension as may be agreed upon in writing between the Department and the Bidder concerned.

All bids will be compared on the basis of the Proposal Pay Items and Bid Price Schedule of the quantities of work to be done.

The lowest, responsive, responsible bidder will be the Bidder submitting the lowest additive total of all the bid items and meeting all other requirements. In the event of a discrepancy between the unit price bid and the extended unit total as stated on the Proposal, the Department uses the amount bid for the unit price in calculating the additive total of the bid items for purposes of award, including revisions by Addenda, and as specified in the Proposal instructions.

Replace section 3-1.05 with:

3-1.05 CONTRACT BONDS (CIVIL CODE § 9550 AND PUBLIC CONTRACT CODE § 20129(b))

The successful Bidder must furnish two bonds:

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- 1. Payment bond to secure the claim payments of laborers, workers, mechanics, or materialmen providing goods, labor, or services under the Contract. This bond must be in a sum not less than one hundred percent (100%) of the total amount payable by the terms of the contract, naming the County as oblige and the State of California as additional obligee.
- 2. Performance bond to guarantee faithful performance of the Contract. This bond must be in a sum not less than one hundred percent (100%) of the total amount payable by the terms of the contract, naming the County as obligee and the State of California as additional obligee.

The Payment and Performance Bond forms are included with the Draft Agreement section of the Contract Documents book. The Department furnishes the successful Bidder bond forms with the Contract award package.

Replace the 1st paragraph and the 1st item of the 2nd paragraph of section 3-1.06 with:

For a federal-aid contract, the Contractor must be properly licensed as a contractor from contract award (Pub Cont Code § 20103.5) through completion and acceptance of the Work, including the guarantee period. Failure to obtain proper and adequate licensing for an award of a Contract constitutes a failure to execute the Contract and results in the forfeiture of the security of the bidder.

1. The Contractor must be properly licensed as a contractor from bid opening (Bus & Prof Code § 7028.15) through completion and acceptance of the Work, including the guarantee period. Failure to obtain proper and adequate licensing constitutes a failure to execute the Contract and results in the forfeiture of the security of the bidder.

Replace section 3-1.08 "SMALL BUSINESS PARTICIPATION REPORT" with:

3-1.08 RESERVED

Replace section 3-1.11 with:

3-1.11 COUNTY PAYEE DATA RECORD FORM

Complete and sign the County Payee Data Record form included in the Contract Proposal package.

Replace section 3-1.18 with:

3-1.18 CONTRACT EXECUTION

The successful Bidder must sign the Agreement.

Deliver to Office Engineer:

- 1) Two Original Signed Agreements, including the attached form FHWA-1273
- 2) Contract Bonds
- 3) Documents identified in section 3-1.07 and 7-1.06
- 4) Documents identified in and marked as specified in section 3-1.14, if applicable.

Office Engineer must receive these documents within 10 business days of the date of the Notice of Award of Contract letter.

The Bidder's security may be forfeited for failure to execute the Contract, furnish any bond, or provide the required insurance documents within the time specified.

The Department does not provide hard copies of the Contract Documents, including the Project Plans to the successful bidder.

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Replace section 3-1.19 with:

3-1.19 BIDDERS' SECURITIES (Pub Cont Code § 20129)

The Department returns the securities of the unsuccessful Bidders within 60 days of Contract award. The Department returns the successful Bidder's security within 60 days of Contract execution.

^^^^^^^

4 SCOPE OF WORK

Replace "RESERVED" in section 4-1.08 with:

4-1.08 SUSPENSION OF WORK ORDERED BY THE ENGINEER

4-1.08A General

- 1. If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within seven (7) calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
- 2. Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.
- 3. No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
- 4. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

Replace "RESERVED" in section 4-1.09 with:

4-1.09 SIGNIFICANT CHANGES IN THE CHARACTER OF WORK

4-1.09A General

- 1. The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.
- 2. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

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- 3. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
- 4. The term "significant change" shall be construed to apply only to the following circumstances:
 - When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

^^^^^^

5 CONTROL OF WORK

Replace the 5th paragraph of section 5-1.01 with:

Ensure the Department's, Caltrans, FHWA, Army Corps of Engineers, California Department of Fish and Game, and California Regional Water Quality Control Board Central Valley Region safe access to the work. Furnish facilities necessary for the Department's, Caltrans,–FHWA, Army Corps of Engineers, California Department of Fish and Game, and California Regional Water Quality Control Board Central Valley Region inspection.

Delete section 5-1.09.

Add the following to the end of the second paragraph of 5-1.13A General:

Include a copy of Certificate of Reported Compliance, as required by emissions reduction regulations mandated by the California Air Resources Board, for each company with road legal diesel vehicles over 14,000 pounds gross vehicle weight.

Replace the 6th paragraph of section 5-1.13A with:

Each subcontract must include the provisions of this contract and each subcontractor must comply with the applicable terms and conditions of this contract.

Replace the 7th paragraph of section 5-1.13A with:

The Department encourages you to and, for USDOT federal-aid assisted projects, you must include a dispute resolution process in each subcontract.

Replace the 1st sentence of the 2nd paragraph of section 5-1.13B(1) with:

Use each DBE Subcontractor as listed on the Subcontractor List form and the Local Agency Bidder – DBE Commitment (Construction Contracts) Exhibit 15-G form unless you receive authorization for a substitution.

Replace the 3rd paragraph of section 5-1.13B(1) with:

You must:

1. Notify the Resident Engineer or Inspector of any changes to anticipated DBE participation listed on the approved DBE Commitment (Construction Contracts) Exhibit 15-G form.

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- 2. Provide this notification in writing prior to starting the DBE's work.
- 3. Maintain records including:
 - Name and business address of each 1st tier subcontractor
 - Name and business address of each DBE subcontractor vendo, and DBE trucking company, regardless of tier
 - Date of payment and total amount paid to each business on the 9-F Monthly Disadvantaged Business Enterprise Payment form

Replace the 5th paragraph of section 5-1.13B(1) with:

After submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month, the prime contractor/consultant shall complete and email the Exhibit 9- F: Disadvantaged Business Enterprise Running Tally of Payments to business.support.unit@dot.ca.gov with a copy to the Agency.

Replace the last sentence of the 6th paragraph of section 5-1.13B(1) with:

Submit the DBE Certification Status Change, Exhibit 17-O, form with the final estimate acceptance statement, which accompanies the Proposed Final Pay Estimate.

Replace the 2nd sentence of the 7th paragraph of section 5-1.13B(1) with:

Submit the Final Report – Utilization of DBE, Exhibit 17-F, form with the final estimate acceptance statement, which accompanies the Proposed Final Pay Estimate.

Replace the 2nd paragraph of section 5-1.13B(2) with:

DBEs must perform work or supply materials as listed in the Local Agency Bidder-DBE Commitment (Construction Contracts), Exhibit 15-G form.

Replace the 7th paragraph of section 5-1.13B(2) with:

Unless the Department authorizes (1) a request to use other forces or sources of materials or (2) a good faith effort for a substitution of a terminated DBE, the Department does not pay for work listed on the Local Agency Bidder-DBE Commitment (Construction Contracts), Exhibit 15-G form unless it is performed or supplied by the listed DBE or an authorized substitute.

Replace section 5-1.13C "DISABLED VETERANS BUSINESS ENTERPRISES" with:

5-1.13C RESERVED

Replace section 5-1.13D "NON-SMALL BUSINESSES" with:

5-1.13D RESERVED

Add to section 5-1.20B(1):

The Department has obtained and included in Appendix B:

1) State of California Encroachment Permit (**Permit No. 0321-NTK0244**) – before beginning work (including traffic control setup) within state right of way obtain a State of California Encroachment permit from:

CALTRANS, DISTRICT 3
PERMIT ENGINEER

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703 B Street Marysville, CA 95901 (530) 741-4403

In accordance with section 9-1.03, full compensation for obtaining the State of California Encroachment Permit (double permit) is included in the payment for the various items of work. Submit a deposit in the amount of \$492.00 along with a set of traffic control plans that are signed and stamped by a professional engineer with your double permit application.

Replace section 5-1.20B(4) with:

Before procuring material, disposing of material, or otherwise using non-highway property, obtain a written agreement from the property owner and authorization to start.

Replace "Reserved" in section 5-1.20G with:

5-1.20G Coordination With Schools

You must provide written notice to the following schools at least one (1) week prior to the start of construction activities, any lane closures, detours, construction staging or any work that may affect traffic or pedestrians through the construction area:

Rescue Union School District	Buckeye Union School District
Cheryl Olson, Superintendent	David Roth, Ph.D., Superintendent
2390 Bass Lake Rd	5049 Robert J. Mathews Parkway
Rescue, CA 95672	El Dorado Hills, CA 95762
(530) 677-4461	(530) 677-2261
Fax: (530) 677-0719	Fax: (916) 934-0920
Locations: 8, 9, 11, 13, 14	Locations: 7, 8, 9, 11, 13, 15,
Mother Lode Union School District	Latrobe School District
Marcy Guthrie, Ed.D., Superintendent	Natalie Miller, Superintendent
3783 Forni Rd	7900 S. Shingle Road
Placerville, CA 95667	
	Shingle Springs, CA 95682
(530) 622-6464	(530) 677-0260
Fax: (530) 622-6163	Fax: (530) 672-0463
Locations: 4, 6	Locations: 1, 2
El Dorado Union High School District	Placerville Union School District
Ron Carruth, Superintendent	Eric Bonniksen, Superintendent
4675 Missouri Flat Rd	1032 Thompson Way
Placerville, CA 95667	Placerville, CA 95667
(530) 622-5081	(530) 622-7216
Fax: (530622-5087	Fax: (530) 622-0336
Locations: 4, 6	Locations: 3, 6, 12
Gold Oak Union School District	Pollock Pines Elementary School District
Stacy Barraque, Transportation Director	Angie Wilbur, Lead Driver Trainer
3171 Pleasant Valley Rd	2702 Amber Trail
Placerville, CA 95667	Pollock Pines, CA 95726
(530) 626-3150	(530) 644-5750
Fax: (530) 626-3145	Fax: (530) 644-3820
Location: 10	Location: 5

Written notices must be approved by Engineer prior to being sent by Contractor. Submit notice 3 business days in advance of sending to Engineer for review and approval.

Replace "Reserved" in section 5-1.20H with:

5-1.20H Coordination With Property Owners

You must make every effort to communicate with adjacent property owners and tenants to inform them of required access for construction operations, and must give forty-eight (48) hours' notice to the property owners and tenants when work is to be performed on their property.

Access to adjacent businesses must be maintained so that the businesses will remain open during all normal business hours.

Replace "RESERVED" in section 5-1.24 with:

5-1.24 COST PRINCIPLES

Comply with the Federal Acquisition Regulations in Title 48, CFR, Part 31 et seq. as applicable, regarding allowable elements of cost for the Work to be performed under this Contract.

- A. You and your subcontractors must comply with 2 CFR Part 225 (formerly OMBA-87), Cost Principles for State, Local And Indian Tribal Governments; with Federal administrative procedures pursuant to 2 CFR, Part 200, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments; and with Contract Cost Principles, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Parts 31 et seq., insofar as those regulations may apply. This provision applies to every sub-recipient receiving funds as a Contractor or subcontractor under this Contract.
- B. Any expenditures for costs for which you have received payment or credit that are determined by subsequent audit to be unallowable under 2 CFR Part 225, 48 CFR, Parts 31 et seq. or 2 CFR, Part 200 are subject to repayment to County.
- C. Travel and per diem reimbursements, if applicable, and third-party contract reimbursements to subcontractors will be allowable as project costs only after you incur and pay for those costs.
- D. Notwithstanding any other provision of the Contract Documents to the contrary, payments for mileage, travel or subsistence expenses, if applicable, for your staff or your subcontractors claimed for reimbursement must not exceed the lesser of (1) the rates to be paid to County employees under the current Board of Supervisors Travel Policy in effect at the time the expenses are incurred; or (2) the rates authorized to be paid to rank and file State employees under current State Department of Personnel Administration (DPA) rules. If the rates claimed are in excess of those authorized DPA rates, you are responsible for the cost difference, and you must reimburse County for any overpayments inadvertently within thirty (30) days of County's demand.
- E. You and your subcontractors must establish and maintain accounting systems and records that properly accumulate and segregate funds received under this Agreement by line item. Your and your subcontractor's accounting systems must conform to Generally Accepted Accounting Principles (GAAP), must enable the determination of incurred costs at interim points of completion, and must provide support for reimbursement of payment vouchers or invoices.

Add item 3 to the 1st paragraph of section 5-1.27B:

3. Closure of all other pending matters under this Contract.

Replace the opening phrase of the 2nd paragraph of section 5-1.27B with:

For at least 4 years after the later of these, retain cost records, including records of:

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County's Cooperative Agreement with the State requires records provisions remain in effect until terminated or modified by mutual written agreement. Retain project records, including cost records, until mutually agreed in writing otherwise:

Replace Section 5-1.27C with:

5-1.27C Record Inspection, Copying, and Auditing

Make your records available for inspection, copying, and auditing by FHWA, the United States Department of Transportation, the Comptroller General of the United States, the State, County or their duly authorized representatives for the same time frame specified under section 5-1.27 B. The records of subcontractors and suppliers must be made available for inspection, copying, and auditing by FHWA, the United States Department of Transportation, the Comptroller General of the United States, the State, County or their duly authorized representatives for the same period. Make records available for examination during normal business hours at your principal place of business in California, for audit during normal business hours at this place of business. Provide office space, photocopies and other assistance to enable audit or inspection representatives to conduct these audits or inspections.

Incorporate this provision in any subcontract entered into as a result of this Contract. Require subcontractors to agree to cooperate with the listed agencies by making all appropriate and relevant Project records available to those agencies for audit and copying.

Replace section 5-1.27E with:

5-1.27E Change Order Bills

Maintain separate records for change order work costs. Submit paper copy change order bills.

Delete the 2nd and 3rd paragraphs of section 5-1.32:

Add to the end of section 5-1.32:

Personal vehicles of your employees must not be parked on the traveled way or shoulders, including sections closed to traffic.

Add to the 1st paragraph of section 5-1.36C.

Pothole all underground utilities prior to construction activities. Underground Service Alert Phone: 811

El Dorado Irrigation District (EID) Main # 24 hr: (530) 622-4513

Mike Brink (530) 642-4054 Fax (530) 642-4354 2890 Mosquito Road Placerville, CA 95667

Pacific Gas and Electric Company 24 Hr # (800) 743-5000

Lee Wells (530) 320-3908 12840 Bill Clark Way Auburn, CA 95602

CVIN 24 HR # (559) 554-9211

Barbara Nelson (559) 554-9119 Fax (559) 442-6047 9479 N. fort Washington Avenue #105 Fresno, CA 93730 Comcast

Gary Abelia (916) 496-5554 1242 National Drive Sacramento, CA 95834

and

Byron Trosper (SEFNCO Communications, Subcontractor to Comcast) (916) 616-8123

AT&T
24 Hr # (866) 346-1168
Astrid Willard
(916) 484-2388
2700 Watt Ave, Room 3473-11
Sacramento, CA 95821

Replace the 1st and 2nd sentence of the 2nd paragraph of section 5-1.46 with:

When the Engineer determines that the work is complete, the Engineer recommends to the Board of Supervisors that the contract be accepted and the Notice of Acceptance be recorded to accept the Contract. Immediately after the acceptance by the Board of Supervisors, you are relieved from:

^^^^^

6 CONTROL OF MATERIALS

Replace the 5th paragraph section 6-2.01A with:

The Department uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract. The Department may examine the records and reports of tests you perform if they are requested and made available at the job site. Schedule work to allow time for QAP.

Replace the 1st sentence of the 3rd paragraph of section 6-2.01E with:

The Department provides an inspection request form and procedures for its submittal.

Replace the 3rd paragraph of section 6-2.01F with:

Submit material to be tested with a Sample Identification Card provided by the Department.

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7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

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Add to section 7-1.02A:

County is relying on federal assistance or grants as well as on state funds for all or a portion of the funding for the Work to be provided under this Contract. As a requirement of County's use of federal and state funds, County is required to comply with certain federal and state contracting requirements and to extend those requirements to its third party contracts. You must comply and must require your subcontractors to comply with all applicable provisions of federal and state regulations, including those required by Caltrans and Federal Highway Administration (FHWA) grant funding requirements, regulations, and related executive orders regarding the use, expenditure, control, reporting, allowable costs and management of such funds as well as these requirements detailed in 2 CFR Part 200, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. You must further comply with all applicable provisions of the Caltrans Local Assistance Procedures Manual and the Local Assistance Program Guidelines, all Title 23 Federal requirements, all 2 CFR Part 200 requirements, and all applicable state and federal laws, regulations and policy; procedural or instructional memoranda. Failure to comply with any federal or state provision may be the basis for withholding payments and for such other remedies as may be appropriate including termination of this Contract. You must also comply with any flow-down or third-party contracting provisions which may be required under the federal and state regulations and which may apply to your subcontracts, if any, associated with this Contract. You must ensure that all subcontractors submit certifications regarding federal lobbying activities as required by Section 1352, Title 31, United State Code and that all such certifications are made a part of any subcontracts entered into as a result of this contract.

Replace section 7-1.02C "Emissions Reduction" with:

7-1.02C Emissions Reduction

Contractor and their sub-contractors must comply with emission reduction regulations mandated by the California Air Resources Board before commencing the performance of the Work, maintain compliance throughout the duration of this Contract, and provide County a Certificate of Reported Compliance for each company with road legal diesel vehicles over 14,000 pounds gross vehicle weight. Contractor must also sign the Certificate of Knowledge - Emissions Reduction Regulations in Article 13, Emissions Reduction, in the Agreement.

Replace "Reserved" in section 7-1.02D with:

7-1.02D Reporting [2 CFR 200.328]

In order to monitor the progress of projects funded in whole or in part by federal funds, federal agencies rely heavily on inspection data. Inspections by the County will be performed on a regular basis and data compiled in report form, as necessary. Supply reporting information to County when requested.

Incorporate this provision in any subcontract entered into as a result of this contract.

Replace "Reserved" in section 7-1.02E with:

7-1.02E Copyrights, Trademarks, and Patents [2 CFR 200.315]

This project will be funded, in part, with federal funds. The USDOT reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal Government proposes:

- 1. The copyright in any work developed under a grant, sub-grant, or contract under a grant or subgrant;
- 2. Any rights of copyright to which a grantee, subgrantee or a contractor purchases ownership with grant support; and

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3. The patent rights to any discovery or invention which arises or is developed in the course of or under such contract.

Incorporate this provision in any subcontract entered into as a result of this contract.

Replace "Reserved" in section 7-1.02F with:

7-1.02F Clean Air Act and Clean Water Act [2 CFR 200 - Appendix II to Part 200]

Comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 7606), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (2 C.F.R. Subtitle B, Chapter XV, Part 1532 (Sec. 1532.10 et seq.)).

Incorporate this provision in any subcontract entered into as a result of this contract.

Replace "Reserved" in section 7-1.02G with:

7-1.02G Energy Policy and Conservation Act [Public Law 94-163]

Comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. : 94-163, 89 Stat. 871).

Incorporate this provision in any subcontract entered into as a result of this contract.

Replace "Reserved" in section 7-1.02H with:

7-1.02H Rehabilitation Act of 1973 and American Disabilities Act of 1990

Comply with:

- Section 504 of the Rehabilitation Act of 1973 (Rehabilitation Act) which prohibits discrimination on the basis of disability in federally assisted programs;
- The Americans with Disabilities Act (ADA) of 1990 which prohibits discrimination on the basis of disability irrespective of funding; and
- All applicable regulations and guidelines issued pursuant to both the Rehabilitation Act and the ADA.

Incorporate this provision in any subcontract entered into as a result of this contract.

Add to the end of section 7-1.02l(2):

You must comply and must require your subcontractors to comply with the Fair Employment Practices Addendum attached as Exhibit B to the Draft Agreement and the Nondiscrimination Assurances attached as Exhibit C to the Draft Agreement of the Contract Documents.

The contractor or subcontractor will never exclude any person from participation in, deny any person the benefits of, or otherwise discriminate against anyone in connection with the award and performance of any contract covered by 49 CFR 26 on the basis of race, color, sex, or national origin. In administering the Local Agency components of the DBE Program Plan, the contractor or subcontractor will not, directly, or through contractual or other arrangements, use criteria or methods of administration that have the effect of defeating or substantially impairing accomplishment of the objectives of the DBE Program Plan with respect to individuals of a particular race, color, sex, or national origin.

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Replace item 1 of the 2nd paragraph of section 7-1.02K(2) with:

1. At the County of El Dorado Department of Transportation's principal office, and are available upon request.

Add to the end of section 7-1.02K(2):

Copies of the general prevailing rate of wages in the county in which the Work is to be done are also on file at the Department of Transportation's principal office, and are available upon request, and in case of projects involving federal funds, federal wage requirements as predetermined by the United States Secretary of Labor have been included in the Contract Documents. Addenda to modify the Federal minimum wage rates, if necessary, will be issued as described in the Project Administration section of this Notice to Bidders.

In the case of federally funded projects, where federal and state prevailing wage requirements apply, compliance with both is required. This project is funded in whole or part by federal funds. Comply with Exhibit D of the Draft Agreement and the requirements of, and compliance with the Copeland Act (18 U.S.C. 874 and 29 CFR Part 3), the Davis-Bacon Act (40 U.S.C. 3141-3147 and 29 CFR Part 5), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 and 29 CFR Part 5).

If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, Contractor and subcontractors must pay not less than the higher wage rate. The Department will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by Contractor and subcontractors, Contractor and subcontractors must pay not less than the federal minimum wage rate which most closely approximates the duties of the employees in question.

Delete paragraphs 6 through 10 of the RSS dated 4/19/19 for section 7-1.02K(3).

Add to section 7-1.02K(4):

It is County policy to encourage the employment and training of apprentices on public works contracts as may be allowed under local apprenticeship standards.

Delete the RSS dated 4-19-19 for section 7-1.02M(2).

Replace "Reserved" in section 7-1.02M(2) with:

7-1.02M(2) Fire Prevention

Cooperate with local fire prevention authorities in eliminating hazardous fire conditions.

Obtain the phone numbers of the nearest fire suppression agency, California Department of Forestry and Fire Protection (Cal Fire) unit headquarters, United States Forest Service (USFS) ranger district office, and U.S. Department of Interior (USDI) BLM field office. Submit these phone numbers to the Engineer before the start of job site activities.

Immediately report to the nearest fire suppression agency fires occurring within and near the project limits.

Prevent project personnel from setting open fires that are not part of the work.

Prevent the escape of and extinguish fires caused directly or indirectly by job site activities.

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Except for motor trucks, truck tractors, buses, and passenger vehicles, equip all hydrocarbon-fueled engines, both stationary and mobile including motorcycles, with spark arresters that meet USFS standards as specified in the *Forest Service Spark Arrester Guide*. Maintain the spark arresters in good operating condition. Spark arresters are not required by Cal Fire, the BLM, or the USFS on equipment powered by properly maintained exhaust-driven turbo-charged engines or equipped with scrubbers with properly maintained water levels. The *Forest Service Spark Arrester Guide* is available at the district offices.

Each toilet must have a metal ashtray at least 6 inches in diameter by 8 inches deep half-filled with sand and within easy reach of anyone using the facility.

Locate flammable materials at least 50 feet away from equipment service, parking, and gas and oil storage areas. Each small mobile or stationary engine site must be cleared of flammable material for a radius of at least 15 feet from the engine.

Each area to be cleared and grubbed must be cleared and kept clear of flammable material such as dry grass, weeds, brush, downed trees, oily rags and waste, paper, cartons, and plastic waste. Before clearing and grubbing, clear a fire break at the outer limits of the areas to be cleared and grubbed. Other fire breaks may be ordered and are change order work.

Furnish the following fire tools:

- 1. 1 shovel and 1 fully charged fire extinguisher UL rated at 4 B:C or more on each truck, personnel vehicle, tractor, grader, or other heavy equipment.
- 2. 1 shovel and 1 backpack 5-gallon water-filled tank with pump for each welder.
- 3. 1 shovel or 1 chemical pressurized fire extinguisher, fully charged, for each gasoline-powered tool, including chain saws, soil augers, and rock drills. The fire tools must always be within 25 feet from the point of operation of the power tool. Each fire extinguisher must be of the type and size required by the Pub Res Code § 4431 and 14 CA Code of Regs § 1234. Each shovel must be size O or larger and at least 46 inches long.

Furnish a pickup truck and driver that will be available for fire control during working hours.

The pickup truck and operator must patrol the area of construction for at least 1/2 hour after job site activities have ended.

Cal Fire, USFS, and BLM have established the following adjective class ratings for 5 levels of fire danger for use in public information releases and fire protection signing: low, moderate, high, very high, extreme. Obtain the fire danger rating daily for the project area from the nearest Cal Fire unit headquarters, USFS ranger district office, or BLM field office.

Arrangements have been made with Cal Fire, USFS, and BLM to notify the Department when the fire danger rating is very high or extreme. This information will be furnished to the Engineer who will notify you for dissemination and action in the area affected. If a discrepancy between this notice and the fire danger rating obtained from the nearest office of either Cal Fire or USFS exists, you must conduct operations according to the higher of the two fire danger ratings.

If the fire danger rating reaches very high:

- 1. Falling of dead trees or snags must be discontinued.
- 2. No open burning is permitted and fires must be extinguished.
- 3. Welding must be discontinued except in an enclosed building or within an area cleared of flammable material for a radius of 15 feet.
- 4. Blasting must be discontinued.

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- 5. Smoking is allowed only in automobiles and cabs of trucks equipped with an ashtray or in cleared areas immediately surrounded by a fire break unless prohibited by other authority.
- 6. Vehicular travel is restricted to cleared areas except in case of emergency.

If the fire danger rating reaches extreme, take the precautions specified for a very high fire danger rating except smoking is not allowed in an area immediately surrounded by a firebreak and work of a nature that could start a fire requires that properly equipped fire guards be assigned to such operation for the duration of the work.

The Engineer may suspend work wholly or in part due to hazardous fire conditions. The days during this suspension are non-working days.

If field and weather conditions become such that the determination of the fire danger rating is suspended, section 7-1.02M(2) will not be enforced for the period of the suspension of the determination of the fire danger rating. The Engineer will notify you of the dates of the suspension and resumption of the determination of the fire danger rating.

Add to the end of section 7-1.03:

If the contractor closes the sidewalk, the contractor must assist with directing pedestrian traffic during their work. Pedestrian access must be provided at all times.

Replace the 15th paragraph of section 7-1.04 with:

Notify the Engineer not less than 5 days and not more than 10 days before the anticipated start of an activity that will change the vertical or horizontal clearance available to traffic, including shoulders.

Add to the end of section 7-1.04:

Where 2 or more lanes in the same direction are adjacent to the area where the work is being performed, including shoulders, the adjacent lane must be closed under any of the following conditions:

- 1. Work is off the traveled way but within 6 feet of the edge of the traveled way, and the approach speed is greater than 45 miles per hour
- 2. Work is off the traveled way but within 3 feet of the edge of the traveled way, and the approach speed is less than 45 miles per hour

Closure of the adjacent traffic lane is not required when performing any of the following:

- 1. Working behind a barrier
- 2. Paving, grinding, or grooving
- 3. Installing, maintaining, or removing traffic control devices except Type K temporary railing

Do not reduce an open traffic lane width to less than 10 feet. When traffic cones or delineators are used for temporary edge delineation, the side of the base of the cones or delineators nearest to traffic is considered the edge of the traveled way.

Replace section 7-1.05 "Indemnification" with:

7-1.05 INDEMNIFICATION

Comply with Article 5 "Indemnity" of the Agreement.

Replace section 7-1.06 "INSURANCE" with:

7-1.06 INSURANCE

7-1.06A General Insurance Requirements

County will not execute this Contract and you are not entitled to any rights, unless certificates of insurances, or other sufficient proof satisfactory to County of El Dorado Risk Management Division that the following provisions have been complied with, and these certificate(s) are filed with the County.

Without limiting your indemnification required by Article 5 "Indemnity" of the Draft Agreement, you must procure and maintain and must require any of your subcontractors to procure and maintain for the duration of the Contract, including the one-year guarantee period, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by you, your agents, representatives, employees or subcontractors. Coverage must be at least as broad as:

Workers' Compensation as required by law in the State of California, with Statutory Limits, and Employer's Liability Insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.

Commercial General Liability Insurance of not less than Four Million Dollars (\$4,000,000) aggregate limit and Two Million Dollars (\$2,000,000) combined single limit per occurrence for bodily injury and property damage, including but not limited to endorsements for the following coverage: Premises, personal injury, operations, products and completed operations, blanket contractual, and independent contractors liability. This insurance can consist of a minimum \$2 Million primary layer of CGL and the balance as an excess/umbrella layer, but only if the County is provided with written confirmation that the excess/umbrella layer "follows the form" of the CGL policy.

Automobile Liability Insurance of not less than One Million Dollars (\$1,000,000) is required in the event motor vehicles are used by the Contractor in performance of the Contract.

In the event Contractor is a licensed professional and is performing professional services under this Contract, Professional Liability Insurance is required with a limit of liability of not less than One Million Dollars (\$1,000,000).

Explosion, Collapse and Underground coverage is required when the scope of work includes XCU exposures. For the purpose of this Contract, XCU coverage is not required.

7-1.06B Proof of Insurance Requirements

Furnish proof of coverage satisfactory to the County of El Dorado Risk Management Division as evidence that the insurance required herein is being maintained. The insurance must be issued by an insurance company acceptable to the Risk Management Division, or be provided through partial or total self-insurance likewise acceptable to the Risk Management Division.

The County of El Dorado, its officers, officials, employees, and volunteers must be included as additional insureds, but only insofar as the operations under this Contract are concerned. This provision applies to all general liability and excess liability policies. Proof that the County is named additional insured must be made by providing the Risk Management Division with a certified copy, or other acceptable evidence, of an endorsement to your insurance policy naming the County additional insured.

If you cannot provide an occurrence policy, provide insurance covering claims made as a result of performance of this Contract for not less than three (3) years following completion of performance of this Contract.

Any deductibles or self-insured retentions must be declared to and approved by the County. At the option of the County, either: the insurer must reduce or eliminate such deductibles or self-insured retentions as respects the County, its officers, officials, employees and volunteers; or the Contractor must procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

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Require each of your subcontractors to procure and maintain commercial general liability insurance, automobile liability insurance, and workers compensation insurance of the types and in the amounts specified above, or you must insure the activities of your subcontractors in your policy in like amounts. You must also require each of your subcontractors to name you and County of El Dorado, its officers, officials, employees, and volunteers as additional insureds.

7-1.06C Insurance Notification Requirements

You agree no cancellation or material change in any policy will become effective except upon prior written notice to the Department of Transportation, 2850 Fairlane Court, Placerville, CA 95667.

You agree that the insurance required herein will be in effect at all times during the term of this Contract. If this insurance coverage expires at any time or times during the term of this Contract, you must immediately provide a new certificate of insurance as evidence of the required insurance coverage. If you fail to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this Contract upon the occurrence of this event. New certificates of insurance are subject to the approval of the Risk Management Division.

7-1.06D Additional Standards

Certificates must meet such additional standards as may be determined by the Department either independently or in consultation with the Risk Management Division, as essential for protection of the County.

7-1.06E Commencement of Performance

Contractor must not commence performance of this Contract unless and until compliance with every requirement of the insurance provisions is achieved.

7-1.06F Material Breach

Failure to maintain the insurance required herein, or to comply with any of the requirements of the insurance provisions, constitutes a material breach of the entire Contract.

7-1.06G Reporting Provisions

Any failure to comply with the reporting provisions of the policies must not affect coverage provided to the County, its officials, employees or volunteers.

7-1.06H Primary Coverage

Your insurance coverage must be primary insurance as respects the County, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers will be in excess of your insurance and will not contribute with it.

7-1.06l Premium Payments

The insurance companies will have no recourse against the County of El Dorado its officers, agents, employees, or any of them for payment of any premiums or assessments under any policy issued by any insurance company.

7-1.06J Contractor's Obligations

Your indemnity and other obligations are not limited by the insurance required herein and must survive the expiration of this Contract.

Add to section 7-1.11A:

The provisions apply to all work performed on the contract including work performed by subcontract. The Form FHWA 1273 is required to be physically incorporated into each contract, subcontract and subsequent lower-tier subcontracts. The provisions may not be incorporated by reference.

The prime contractor is responsible for compliance with the requirements by all subcontractors and lower tier subcontractors. Failure of the prime contractor to comply with this requirement is grounds for local agency termination of the contract with the contractor and debarment of the contractor by the FHWA.

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8 PROSECUTION AND PROGRESS

Add between the 3rd and 4th paragraphs of section 8-1.02C(1):

Submit compatible software for the Engineer's exclusive possession and use.

Add to the 1st paragraph of section 8-1.02C(3)(a):

After authorization of the proposed software, submit schedule software and original software instruction manuals. The Engineer returns the schedule software to you before the final estimate. The Department pays you by force account for replacement of software or manuals damaged, lost, or stolen after submittal.

Add to the end of the 3rd paragraph of section 8-1.02C(3)(a):

Contractor has the option to utilize Microsoft Project. If Microsoft Project is utilized, the requirements for submitting compatible software in section 8-1.02C(1) and for software training in section 8-1.02C(3)(b) of the Special Provisions are waived.

Replace "Reserved" in section 8-1.02C(3)(b) with:

8-1.02C(3)(b) Computer Software Training

Instruct the Engineer in the use of the software and provide software support until Contract acceptance.

Within 15 days after the date of the Notice of Award letter, provide a commercial training session for 2 Department employees in the use of the software at a location acceptable to the Engineer. For Primavera P6 software, the training session must be 8 hours. For other software, the training session must be 16 hours.

The Department recommends that you send at least 2 employees to the same training session to facilitate development of similar knowledge and skills in the use of the software.

Replace the 1st paragraph of section 8-1.02C(5) with:

Submit a baseline schedule and all support data within 20 days after the date of the Notice of Award letter. Allow 20 days for review after the submittal. The baseline schedule submittal is not complete until the computer software is installed for use. The Engineer will not postpone issuance of the Notice to Proceed if your baseline schedule submittal fails to meet the contract requirements requiring multiple submittals and reviews of your baseline schedule.

Replace the 1st and last sentences of the 1st paragraph of section 8-1.03 with:

Attend a pre-construction conference with key personnel, including the Caltrans representative, all major superintendents for the work and if requested by the Engineer, major subcontractors a minimum of 10 days prior to the start of work in the field. The pre-construction conference will be scheduled after the project is awarded and prior to the issuance of the Notice to Proceed. At this conference, submit in writing, signed by the officers of the corporation, if applicable, the names of two employees who will be the superintendents on the project. The second name serves as an alternate in the absence of the first designee. The superintendent must be on the site at all times that work is in progress.

With the exception of preparing and obtaining Department's authorization of the Storm Water Pollution Prevention Plan (SWPPP), or Water Pollution Control Program (WPCP), whichever is applicable, and preparing and obtaining Department's acceptance of the Critical Path Method (CPM) baseline schedule, any work performed in advance of the date stated in the Notice to Proceed is at your risk and as a volunteer. Submit a completed Subcontracting Request form, Exhibit 16-B of the Caltrans Local Assistance Procedures Manual (LAPM), or equivalent and obtain approval before beginning work on a subcontract. Comply with applicable parts of section 5-1.13B(1).

Delete "Partnering" from the table in section 8-1.03.

Add to section 8-1.03:

You must attend weekly meetings to discuss construction issues and scheduling.

Replace section 8-1.04B with:

The contract working days begin on the date stated in the Notice to Proceed.

The Engineer will issue Notice to Proceed 10 days after Contract approval.

Do not start job site activities until the Department authorizes or accepts your submittal for:

- 1. CPM baseline schedule
- 2. WPCP if applies
- 3. Traffic Control Plan
- 4. HFST QCP as stated in section 38-1.01A
- 5. Lead Compliance Plan
- 6. Work Plan for Removal, Handling, and Disposal of Yellow Traffic Stripe & Markings
- 7. Fugitive Dust Plan

You may enter the job site only to measure controlling field dimensions and locating utilities.

Do not start other job site activities until all the submittals from the above list are authorized or accepted and the following information is received by the Engineer:

- 1. Notice of Materials To Be Used.
- 2. Contingency plan for reopening closures to public traffic.
- 3. Written statement from the vendor that the order for the sign panels has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.
- Certificate of Reported Compliance with CARB for road legal diesel vehicles over 14,000 pounds gross vehicle weight.

Replace the 1st paragraph of section 8-1.05 with:

Contract time starts on the day specified in section 8-1.04B.

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Contract working hours are between the hours of 9:00 pm. to 6:00 a.m. and 7:00 am to 5:00 pm unless otherwise authorized. Work between 7:00 am to 5:00 pm will be for striping removal and application. Work between 9:00 pm to 6:00 am will be for High Friction Surface Treatment application.

Add to the end of section 8-1.06:

The Engineer may suspend work due to environmental permit restrictions and/or inclement weather.

During the suspension, the Department pays for winterization costs or costs associated with water pollution control within the County's Project area under Section 9-1.04 of the Standard Specifications, as applicable. The Department pays for any other contract work required to be performed within the County's project area during the suspension under the applicable bid item.

Replace the 1st paragraph of Section 8-1.10A with:

The Department specifies liquidated damages (Gov. Code § 53069.85 & Pub Cont Code § 7203). Liquidated damages, if any, accrue starting on the 1st day after the expiration of the working days through the day of Contract acceptance except as specified in sections 8-1.10B and 8-1.10C.

Add to the end of section 8-1.10B:

Liquidated damages for not completing all work described in the contract documents and plans within the allowable working days are \$4,000.00 per day.

Replace "Reserved" in section 8-1.10D with:

8-1.10D Director Days

If the work is not completed within the working days, the Director may grant director days if it serves the Department's best interest.

By granting director days, the Director adds working days to the Contract. The Director may either grant enough days to eliminate the liquidated damages or fewer. In the latter case, the Department deducts liquidated damages for the remaining overrun in Contract time. The Director may deduct the Department's engineering, inspection, and overhead costs incurred during the period of extension granted as director days.

Replace section 8-1.13 "Contractor's Control Termination" with:

Refer to Article 10 "Termination By County for Cause" of the Agreement.

Replace section 8-1.14 "Contract Termination" with:

Refer to Article 9 "Termination By County for Convenience" of the Agreement.

9 PAYMENT

Add to end of section 9-1.03:

The Department pays 6 percent annual interest for the period of the retention for penalty withholds later determined not owed.

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Replace the last paragraph of section 9-1.03 with:

You and/or your subcontractors must pay subcontractors within seven (7) days of receipt of each progress payment unless otherwise agreed to in writing (Bus & Prof Code § 7108.5), the respective amounts allowed the contractor on account of the work performed by the subcontractors, to the extent of each subcontractor's interest therein. In the event that there is a good faith dispute over all or any portion of the amount due on a progress payment from the prime contractor or subcontractor to a subcontractor. the prime contractor or subcontractor may withhold no more than 150 percent of the disputed amount. Any violation of this requirement shall constitute a cause for disciplinary action and shall subject the licensee to a penalty, payable to the subcontractor, of 2 percent of the amount due per month for every month that payment is not made. In addition, Federal Regulation (49CFR 26.29) requires you and your subcontractors to pay subcontractors within thirty (30) days after receipt of each payment, unless any delay or postponement of payment among the parties takes place only for good cause and with the prior written approval of the Department. Violation of this section subjects you to the penalties, sanctions and other remedies of Bus and Prof § 7108.5. This section must not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to you in the event of a dispute involving late payment or nonpayment by you, deficient subcontract performance, or noncompliance by a subcontractor.

In any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to his or her attorney's fees and costs. The sanctions authorized under this requirement shall be separate from, and in addition to, all other remedies, either civil, administrative, or criminal. This clause applies to both DBE and non-DBE subcontractors.

You must include in your subcontracts language providing that you and your subcontractors will use a dispute resolution process to resolve payment disputes.

Add to the beginning of section 9-1.16A:

The Department shall make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract. If the Department fails to pay promptly, the Department shall pay interest to the contractor, which accrues at the rate of 10 percent per annum on the principal amount of a money judgment remaining unsatisfied. Upon receipt of a payment request, the Department shall act in accordance with the following:

- 1. Each payment request shall be reviewed by the Department as soon as practicable after receipt for the purpose of determining that it is a proper payment request.
- 2. A payment request determined to be a proper and suitable for payment will result in an Engineer-prepared monthly progress estimate.
- 3. Any payment request determined not to be a proper payment request suitable for payment shall be returned to the contractor as soon as practicable, but not later than seven (7) days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

Add to section 9-1.16A:

The Engineer does not process a progress estimate without your submittal of the actual DBE payments, required DBE forms, the DBE firms paid, and the work/bid item for each DBE firm for the previous month.

Replace the last sentence of the 3rd paragraph of section 9-1.16E(2) with:

These amounts are shown on the *Pay Estimate*.

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Replace the last sentence of the 1st paragraph of section 9-1.16E(3) with:

The documents include QC plans, required forms, schedules, traffic control plans, water pollution control submittals, and dust control submittals.

Add to the 1st paragraph of section 9-1.16E(3):

If you fail to comply with water pollution control or dust control requirements, the Department withholds part of the progress payment.

Replace the 2nd paragraph of section 9-1.16E(4) with:

Stop notice information may be obtained from the Engineer.

Replace section 9-1.16F with:

9-1.16F Retentions

9-1.16F(1) General

The Department will retain 5% of the value of each progress payment (excluding mobilization payments) from each progress payment. The Department will release retention incrementally (49 CFR 26.29) as follows:

- 1. When 25% of the total amount bid (excluding mobilization) has been completed, the Department will release all retention withheld up to this point;
- 2. When 50% of the total amount bid (excluding mobilization) has been completed, the Department will release all retention withheld since the previous release;
- 3. When 75% of the total amount bid (excluding mobilization) has been completed, the Department will release all retention withheld since the previous release.
- 4. The remaining retained funds shall be retained until thirty five (35) days after recordation of the Notice of Acceptance.

Work increments deemed complete by the Engineer under this section do not affect your other contractual obligations pertaining to that work, including the commencement of the warranty period or your obligation of maintenance and responsibility for that increment of work. Relief from maintenance and responsibility is at the discretion of the Engineer and must conform to the provisions of section 5-1.38.

You may elect to receive one hundred percent (100%) of payments due under the Contract from time to time, without retention of any portion of the payment by the County, by depositing securities of equivalent value with the County (Pub Cont Code 22300). Securities eligible for deposit hereunder are limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

Funds retained from progress payments to ensure performance of the Contract that are eligible for payment into escrow or to an escrow agent pursuant to Section 22300 of the Public Contract Code do not include funds withheld or deducted from payment due to your failure to fulfill a contract requirement.

9-1.16F(2) Prompt Payment of Retained Funds to Subcontractors

Section 9-1.16F(1) describes retainage, acceptances, and release of retainage to you based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from all subcontractors within seven (7) days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the Agency. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written

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approval. Any violation of these provisions shall subject the violating prime contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code and Section 10262 of the California Public Contract Code. In addition, Federal Regulation (49CFR 26.29) requires you and your subcontractors must return all monies withheld in retention from subcontractors within thirty (30) days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the Department. Any delay or postponement of payment over 30 days may take place only for good cause and with the Department's prior written approval (49CFR26.29). Violation of this section subjects you to the penalties, sanctions and other remedies of Bus and Prof § 7108.5. This section must not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to you and your subcontractors in the event of a dispute involving late payment or nonpayment by you, deficient subcontract performance, or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Any violation of these provisions shall subject the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified therein. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

Replace section 9-1.22 "ARBITRATION" with:

9-1.22 DISPUTES RESOLUTION

As permitted by Public Contract Code section 20104, the County has elected to resolve any claims between you and the County pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2 of the Public Contract Code. Sections 5-1.43 and 9-1.17 describe the contract claim procedure. The provisions of these sections constitute a non-judicial claim settlement procedure, and also step one of a two-step claim presentment procedure by agreement under Section 930.2 of the California Government Code. Specifically, step one is compliance with the contract claim procedure in accordance with the Contract Documents, including sections 5-1.43 and 9-1.17. Step two is the filing of a timely Government Code Section 910 et seq. claim in accordance with the Contract claim procedure and previous dispositions under sections 5-1.43 and 9-1.17. Any claim that fails to conform to the contract claim procedure required in step one may not be asserted in any subsequent Government Code Section 910 et seq. claim.

As a condition precedent to arbitration or litigation, claims must first be mediated. Mediation is non-binding and the services of a mediator mutually acceptable to the parties must be used and, if the parties cannot agree, a mediator will be selected by the American Arbitration Association from its panel of approved mediators trained in construction industry mediation. All statutes of limitations shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. The cost of mediation shall be equally shared by the parties.

Your attention is directed to California Public Contract Code section 9204, which describes procedures for the resolution of claims on public works projects. Among other things, section 9204 requires the claimant to furnish reasonable documentation to support a claim, requires the public entity to respond to the claim within 45 days of receipt of the claim, and allows for the claimant to demand an informal meet and confer conference for settlement of the issues in dispute. For any portion of a claim that remains in dispute, section 9204 requires submission of the claim to non binding mediation. Additionally, section 9204 requires the public entity to make any payment due on an undisputed portion of the claim within 60 days of the public entity's written response and to pay interest at the rate of 7 percent per annum on any amounts not paid in a timely manner. The claims procedures described within the Contract Documents {including, but not limited to, Sections 5-1.43 and 9-1.17 of the Standard Specifications} are in addition to the procedures required by section 9204 and, in the event of a conflict between those various procedures, the more stringent procedures will control.

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If you fail to comply with these claim procedures as to any claim, then you waive your rights to this claim. County must not be deemed to waive or alter any provision of this section or sections 5-1.43 and 9-1.17 if, at County's sole discretion, County administers a claim in a manner not in accord with those provisions.

DIVISION II GENERAL CONSTRUCTION 10 GENERAL

Replace "Reserved" in section 10-1.02A with:

Contractor must provide the order in which the locations will be completed in the schedule.

Contractor must wait a minimum of 7 calendar days after application of HFST before installing permanent pavement delineation and pavement markers.

Add section 10-1.02F:

10-1.02F Pre-Construction Drainage Patterns

During construction maintain adequate drainage such that pre-construction drainage patterns are not compromised. The Engineer determines pre-construction drainage patterns.

Add to the end of section 10-4:

Payment for any water conservation plan will be paid under section 9-1.04.

^^^^^

12 TEMPORARY TRAFFIC CONTROL

Add to the end of section 12-1.01:

Traffic control must be placed, maintained, and performed by a California C-31 Construction Zone Traffic Control Contractor and be in accordance with the latest edition of CA MUTCD and Caltrans Standards.

Replace Item 1.3 of the 1st paragraph of section 12-3.01A(3) with:

Contract number, CIP number, Caltrans district, county, route and post mile of project limits or County Road name.

Add to section 12-3.32C:

Place and operate PCMS two working days in advance of lane closures to inform the public of upcoming contract work and related delays. Start displaying the message on the sign when directed by the Engineer. The Engineer may decide that PCMSs are not required for all locations. PCMS shall be placed prior to all striping removal work and HFST applications. PCMS will not be required prior to installation of new striping and pavement markings following HFST application.

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Approaching drivers must be able to read the entire message at least 2 times before passing the portable changeable message sign at the posted speed limit. Use more than 1 portable changeable message sign to comply with this requirement if necessary.

Add to section 12-4.02A(3)(a):

You must submit a Traffic Control Plan for review and approval. Your Traffic Control Plan must address each type of temporary traffic control system that will be used. Your Traffic Control Plan must include detailed controls, including but not limited to flaggers, lane closures, PCMS boards, and signs, as applicable. Your Traffic Control Plan must include signing required on intersecting streets and driveways within the area that will require traffic control as required and must address traffic control related to access to driveways for all residences.

Submit your Traffic Control Plan as early as ten (10) working days after the receipt of the Notice of Award but no later than five (5) working days of receipt of Notice to Proceed. No work will start on County roads until the Traffic Control Plan is approved. Violation of the Traffic Control requirements is justification for the Engineer to stop work until the requirements are met.

Submit County-approved traffic control plans for Location 13 Cambridge Rd at Knollwood Dr along to Caltrans along with your Caltrans encroachment permit application.

Replace the first paragraph of Section 12-4.02A(3)(b) with:

Shoulder/lane closure requests must be submitted to the Caltrans representative by email (with the form filled out) by NOON on the Monday preceding the week of planned work, i.e. if you need a closure for a Friday, you must make that request on the Monday of the preceding week (11 days prior). Requests received after NOON on Monday will not be processed until the following Monday.

Replace the last two paragraphs of Section 12-4.02A(3)(b) with:

Cancel closure requests at least 48 hours before the start time of the closure.

The Engineer may reschedule a closure cancelled due to unsuitable weather.

If a closure is not opened to traffic by the specified time, suspend work. No further closures are allowed until the Engineer has reviewed and authorized a work plan submitted by you that ensures that future closures will be opened to traffic by the specified time. Allow 2 business days for review of your proposed work plan. The Department does not compensate you for your losses due to the suspension of work resulting from the late opening of closures.

Notify the Engineer of delays in your activities caused by:

- 1. Your closure schedule request being denied, although your requested closures are within the specified time frame allowed for closures. The Department does not compensate you for your losses due to amendments to the closure schedule that are not authorized.
- 2. Your authorized closure being denied.

If you are directed to remove a closure before the time designated in the authorized closure schedule, you will be compensated for the delay.

Add between the 1st and 2nd paragraphs of section 12-4.02A(3)(c):

Submit a contingency plan for each of the following activities:

1. Contingency plan for possible failure during the HFST application

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2. Failure to re-open Cambridge Road

Add between the 4th and 5th paragraphs of section 12-4.02C(1):

Not more than 1 stationary closure is allowed per direction of travel at one time.

Add to the end of section 12-4.02C(1):

Keep the full width of the traveled way open to traffic when no active construction activities are occurring in the traveled way or within 6 feet of the traveled way and on:

- 1. Friday after 3:00 p.m.
- 2. Saturday
- 3. Sunday
- 4. Designated holidays5. Special days

Keep a minimum of one (1) paved traffic lane at least ten (10) feet wide open for traffic at all times.

Replace the 1st paragraph of section 12-4.02C(2)(b) with:

Lane or shoulder closures are not authorized unless approved by Caltrans' Traffic Management Center (TMC). All closures and cancelled closures must be called in to TMC dispatch at (916) 859-7900 (10-97 closure up; 10-98 closure down; 10-22 closure cancelled) at the beginning and end of each scheduled closure. Failure to do so could result in denial of future closure requests.

Replace the 5th paragraph of section 12-4.02C(2)(b) with:

For closures not needed on the authorized date, use code 10-22 to cancel the closure at the authorized start time.

Add to the end of section 12-4.02C(2)(b):

Contractor must keep a log of all closures called in to TMC and include the name of the TMC dispatch person at the TMC. A copy of the log must be provided via e-mail to the Engineer and the Caltrans representative at the end of each week, no later than close of business on Friday.

Replace "Reserved" in section 12-4.02C(3)(f) with:

Lane closure restrictions for designated holidays and special days are shown in the following table:

	La	ne Closu	re Restric	tions For	Designat	ed Holida	ys And S	pecial Da	ıys	
Thu	Fri	Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun
	Н									
Х	XX	XX	XX							
	SD									
	XX									
		Н								
Χ	XX	XX	XX							
		SD								
		XX								
			Н							
	Х	XX	XX	XX						
			SD							
			XX							
				Н						
	Х	XX	XX	XX	XXX					
				SD						
	Х	XX	XX	XX	XXX					
					Н					
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						Н				
					Х	SD XX				
						XX	Н			
						v		vv	vv	
						Х	SD XX	XX	XX	XX
							XX			1
Legend:	I	I	1	J	1		1 70.	I	I	1
3		lane requi	rement ch	arts.						
Х					be open f	or use by	traffic afte	r 1700.		
XX					be open f					
XXX								I 0800.		
Н	The full width of the traveled way must be open for use by traffic until 0800. Designated holiday									
SD	Special c									

Replace "Reserved" in section 12-4.02C(3)(k) with:

Comply with the requirements for a conventional highway lane closures shown in the following chart:

	Chart No. 1 Conventional Highway Lane Requirements																							
Count	County: El Dorado Route/Direction: See Remarks Post Mile: N/A below																							
Closur	Closure limits: N/A																							
Hour 2	4 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon– Thu	R	R	R	R	R	Z	Ν	R	R	R	R	R	R	R	R	R	Z	Ν	N	Ν	R	R	R	R
Fri	R	R	R	R	R	N	N	R	R	R	R	R	R	R	R	R	N	N	N	N	R	R	R	R
Sat	N	Ζ	N	N	N	Ν	N	N	Ν	N	N	N	Ζ	Ν	Ν	Ν	Ν	N	N	N	N	N	Ν	N
Sun	N	Z	N	N	N	Ζ	N	N	Ζ	N	Ν	N	Z	Ζ	Ζ	Ν	Ζ	N	N	N	Ν	N	Ζ	Ν
Legen	d:																							
N	No	worl	(is a	allov	∕ed.																			
R	R Provide at least 1 through traffic lane not less than 10 feet in width for use by both directions of travel. (Reversing Control)																							
REMA	REMARKS:																							
•	See Section 8-1.05 of these Special Provisions for allowable working hours.																							
•	 0800 – 1700 lane closures/reversing control apply to locations 1, 2, 4, 5, 7, 8, 10, 14 																							
•	2100-0600 reversing control applies for working hours to apply the HFST.																							

	Chart No. 2 Conventional Highway Lane Requirements																							
County	County: El Dorado Route/Direction: See Remarks Post Mile: N/A below																							
Closure limits: N/A																								
Hour 2	4 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon– Thu	R	R	R	R	R	Z	Ν	Ν	R	R	R	R	R	R	R	Z	Ν	Ν	N	Z	R	R	R	R
Fri	R	R	R	R	R	N	N	N	R	R	R	R	R	R	R	N	N	N	N	N	R	R	R	R
Sat	N	Ν	Ν	Ν	N	Ν	N	N	Ν	N	N	N	N	N	Ν	Ν	N	N	N	N	Ν	N	N	N
Sun	N	Ζ	Ν	Ν	N	Ζ	N	N	Ζ	Ν	Ν	N	N	N	Ζ	Ν	N	N	N	N	Ν	N	N	Ν
Legen	d:																							
N	No	worl	(is a	allow	∕ed.																			
R	R Provide at least 1 through traffic lane not less than 10 feet in width for use by both directions of travel. (Reversing Control)																							
REMA	RKS	:																						
•	 See Section 8-1.05 of these Special Provisions for allowable working hours. 																							
•	0900 – 1600 lane closures/reversing control apply to locations 3, 6, 9, 11, 12, 15																							
•	0400 0000																							

Replace "Reserved" in section 12-4.02C(3)(m) with:

Comply with the requirements for the closure of either northbound or southbound Cambridge Road at Knollwood Drive shown in the following chart:

	Chart No. 3 Detour of Cambridge Road at Knollwood Drive																							
Locati			oridg	je Ro	oad,			Dire						ad -	_									
Cameron Park Combined approach																								
Closure limits:																								
Hour 2	4 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon– Thu	С	С	С	С	С	N	N	N	С	С	С	С	C	С	N	N	Ν	Ν	N	Ν	С	С	С	С
Fri	C C C C N N N C C C C C N N N N N C C C C																							
Sat	Ν	N	Ν	N	Ν	N	Ν	N N N N N N N N N N N N N N N N N N N								Ν								
Sun	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Z	Ν	Ν	Ν	Ν	Ν	N	Ν	Z	Ν	Ν	Ν	Ν
Legen	d:																							
С													sed	. Or	ıly o	ne d	irec	tion	of tr	avel	ma	y be	clos	ed
	at a	tim	e. N	о со	mple	ete r	oad	clos	ure	is al	lowe	ed.												
N	No	work	(is a	allov	∕ed.																			
REMA	RKS	: Th	e nu	mbe	er of	thro	ugh	traff	ic la	nes	in e	ach	dire	ctior	of of	trave	el is	·						
•	Se	e se	ctior	า 8-1	.05	of th	iese	Spe	ecial	Pro	visio	ns f	or a	llow	able	wor	king	hοι	ırs.					
•													_			Kno								
•	 Only one direction of travel may be closed at a time. Use respective detour plan according to which direction of travel is being worked on. 																							
•	210	0-00	600	reve	ersin	g cc	ntro	l api	olies	for	worl	king	hou	rs to	ap _l	ply tl	ne H	IFS1	Γ.					

Add to the end of section 12-4.02C(7)(b):

Not more than 1 stationary closure is allowed in each direction of travel at one time.

For a stationary one-way-reversing traffic-control lane closure, you may stop traffic in 1 direction for periods not to exceed ten (10) minutes. After each stoppage, all accumulated traffic for that direction must pass through the work zone before another stoppage is made.

The maximum length of a single stationary one-way-reversing traffic-control lane closure is 2 miles between flaggers.

Transport bicyclists through the one-way-reversing traffic-control work zone.

You may use a pilot car to control traffic. If a pilot car is used to control traffic, the cones shown along the centerline are not required. Pilot cars must have cellular or radio contact with other pilot cars and personnel in the work zone. The maximum speed of the pilot cars convoying traffic through the traffic control zone is 25 mph. Pilot cars must only use traffic lanes open to traffic.

Add to section 12-4.02D:

Payment for Traffic Control Plan is paid for under Traffic Control System.

Replace "Not Used" in section 12-4.04D with:

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Payment for accommodating pedestrians and bicyclists through the work zone, including through a 1-way reversing traffic control work zone is included in the payment for Traffic Control System.

Add to the beginning of section 12-6.03B:

After removal of the existing pavement delineation, Contractor must install and maintain temporary pavement delineation until final striping is installed per section 84-2.03. Due to "shedding" of the HFST, permanent pavement delineation must not be installed for a minimum of one (1) week after application of the HFST.

Replace section 12-6.04 with:

Payment for temporary pavement delineation must be made with the "Temporary Pavement Delineation" pay item at the contract lump sum price. Payment will constitute full compensation for furnishing all labor, material, tools, equipment, incidentals, and work involved in installing and maintaining Temporary Pavement Delineation at all project locations.

The County does not pay for additional temporary pavement delineation used to maintain and replace temporary pavement markers.

^^^^^

13 WATER POLLUTION CONTROL

Add item 9 to the list in the 5th paragraph of section 13-1.03C:

9. Inspect sanitary and septic waste storage and monitor disposal procedures weekly.

Replace the 2nd paragraph of section 13-2.01A with:

Prepare water pollution control program includes developing, amending, and implementing the WPCP, providing a WPC Manager, conducting WPC training, and installing, monitoring, inspecting, reporting on, maintaining, and removing and disposing of WPC practices at the job site.

Replace the 1st sentence of the 1st paragraph of section 13-2.01C with:

Within 7 days after the date of the Notice of Award letter, submit 3 copies of the WPCP and allow 7 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped.

Replace the 3rd paragraph of section 13-2.01C with:

Change and resubmit the WPCP within 7 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete WPCP is resubmitted.

Add to section 13-2.01C:

The Engineer will not postpone issuance of the Notice to Proceed if your WPCP submittal fails to meet the contract requirements requiring multiple submittals and reviews of your WPCP.

Add to section 13-2.03:

If the Engineer determines that you are not in compliance with section 13, the Engineer may redirect any of your resources available at the project site towards becoming compliant. The County will not be responsible for any delays to your schedule resulting from the reallocation of your resources and no compensation will be made for these delays.

Replace "upon Contract acceptance" in item 2 of section 13-2.04 with:

in the Proposed Final Pay Estimate.

Add to the 4th paragraph of section 13-4.03B(1):

The WPC manager must notify the Engineer immediately.

Add to the 3rd paragraph of Section 13-4.03F:

3. 8 hours of predicted rain

Replace section 13-5.04 with:

The Department pays for temporary soil stabilization for stockpiles under job site management. The Department pays for temporary soil stabilization for other than stockpiles under section 9-1.04 excluding travel and subsistence allowances paid to workers.

Replace the 4th paragraph of section 13-6.04 with:

The Department pays for temporary sediment control under job site management.

Add to the end of the 3rd paragraph of section 13-7.02C:

Excess and loose aggregate must be removed from the traveled way and shoulders by street sweeping after curing. Additional sweeping must be performed in accordance with section 38-1.03D of these Special Provisions.

Replace the 1st paragraph of section 13-7.03D with:

The Department pays for temporary tracking control under job site management.

Replace "Not Used" in section 13-10.04 with:

The Department pays for temporary linear sediment barriers for stockpiles under job site management.

The Department pays for temporary linear sediment barriers for other than stockpiles under section 9-1.04 excluding travel and subsistence allowances paid to workers.

14 ENVIRONMENTAL STEWARDSHIP

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Add to section 14-1.01:

All personnel (employees, contractor, and subcontractors) performing work on the Project must be adequately informed and trained regarding the conditions set forth in these Special Provisions and the Standard Specifications for environmental stewardship.

Add to the end of section 14-1.02:

Temporary Fence (Type ESA) must comply with section 80.

Replace section 14-8.02 with:

The work is located in Rural Regions, Rural Centers, and Community Regions with multiple land use designation.

The following table specifies the maximum allowable noise exposure for work within the community types and land use designations listed above.

MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN COMMUNITY REGIONS AND ADOPTED PLAN AREAS-CONSTRUCTION NOISE										
Noise Level (dB)										
Land Use Designation (Time Period	L _{eq}	L							
	7 am–7 pm	55	75							
Higher-Density Residential (MFR, HDR, MDR) (Locations 5, 6, 8, 9, 11)	7 pm–10 pm	50	65							
(Locations 5, 6, 6, 9, 11)	10 pm–7 am	45	60							
Commercial and Public Facilities (C, R&D, PF)	7 am-7 pm	70	90							
(Location 7, 13)	7 pm–7 am	65	75							
Industrial (I)	Any Time	80	90							

Note:

Adopted Plan areas should refer to those land use designations that most closely correspond to the similar General Plan land use designations for similar development.

MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN RURAL CENTERS-CONSTRUCTION NOISE										
		Noise L	evel (dB)							
Land Use Designation	Time Period	L	L							
AUD II (II (AAED LIDD AADD)	7 am–7 pm	55	75							
All Residential (MFR, HDR, MDR) (Location 4)	7 pm–10 pm	50	65							
(Location 4)	10 pm–7 am	40	55							
Commercial, Recreation, and Public Facilities	7 am-7 pm	65	75							
(C, TR, PF)	7 pm–7 am	60	70							
Industrial (I)	Any Time	70	80							
Open Space (OS)	7 am–7 pm	55	75							
Open Space (OS)	7 pm–7 am	50	65							

MAXIMUM ALLOWABLE NOISE EXPOSURE FOR RURAL REGIONS-CON		TION NOISE S	SOURCES IN
Land Has Designation	Time Deviced	Noise L	_evel (dB)
Land Use Designation	Time Period	L eq	L max

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AND II (II (IDD)	7 am–7 pm	50	60
All Residential (LDR) (Locations 15)	7 pm–10 pm	45	55
(Locations 13)	10 pm–7 am	40	50
Commercial, Recreation, and Public Facilities	7 am-7 pm	65	75
(C, TR, PF)	7 pm–7 am	60	70
Rural Land, Natural Resources, Open Space, and	7 am–7 pm	65	75
Agricultural Lands (RR, NR, OS, AL)	7 pm–7 am	60	70
(Locations 1, 2, 3, 10, 12, 14)			

The noise level requirements apply to the equipment on the job or related to the job measured at the affected building facade, including trucks, transit mixers or transient equipment that you may or may not own. Avoid the use of loud sound signals in favor of light warnings except those required by safety laws for the protection of personnel.

In the interest of the public safety and/or public convenience, the allowable noise levels may be waived.

Implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, shutting off idling equipment, rescheduling your activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources such that noise from construction does not exceed the limits specified above. If the existing background noise levels exceed the values above, then the limit for construction noise may be increased from the background noise level by the same percentage that the background noise level exceeds the values above.

Replace section 14-9.02 with:

Comply with applicable State and County Air Quality Management District (AQMD) rules and regulations regarding reduction of construction related impacts on air quality, including the implementation of the following measures:

- 1. Use low-emission onsite mobile construction equipment.
- 2. Maintain equipment in tune per manufacturer's specifications.
- 3. Retard diesel engine injection timing by two to four degrees unless not recommended by manufacturer (due to lower emission output in-place).
- 4. Use reformulated low-emission diesel fuel.
- 5. Substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible.
- 6. Use catalytic converters on gasoline-powered equipment.
- 7. Do not leave inactive construction equipment idling for prolonged periods (i.e., more than 2 minutes).
- 8. Support and encourage ridesharing and transit for the construction workers.
- 9. All construction vehicles and equipment shall be fitted with working mufflers.

Replace "RESERVED" in section 14-9.04 with:

14-9.04 DUST CONTROL

14-9.04A GENERAL 14-9.04A(1) Summary

Section 14-9.04 includes specifications relating to dust control.

Comply with Rules 223. 223-1, and 223-2 (Dust Rules) of the Rules and Regulations of the El Dorado County Air Quality Management District (AQMD).

The Dust Rules can be obtained from the AQMD, 330 Fair Lane, Placerville, CA, 95667, (530) 621-6662, and are available at AQMD's website.

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The materials within the project limits are neither known nor suspected to contain naturally occurring asbestos and the project is not located within designated Naturally Occurring Asbestos Review Areas on the current El Dorado County Naturally Occurring Asbestos Review Area Map.

14-9.04A(2) Submittals

Submit a site specific Fugitive Dust Control Plan / Fugitive Dust Plan (FDP) for all proposed work, meeting the requirements of the Dust Rules approved by AQMD, to the AQMD prior to start of any work. Provide the Engineer with four (4) copies of the AQMD approved FDP prior to starting any work that may generate dust. The FDP application can be found on AQMD's website at: http://www.edcgov.us/Government/AirQualityManagement/Construction Dust Rules.aspx.

Prepare an amendment to the FDP when there is a change in construction activities not included in the FDP, when the Contractor's activities violate a condition of AQMD, or when ordered by the Engineer.

Amendments must identify additional dust control practices or revised operations, including those areas or activities not identified in the initially approved FDP. Amendments to the FDP must be prepared and submitted for review and approval within a time approved by the Engineer. At a minimum, the FDP must be amended annually.

Keep one (1) copy of the approved FDP and approved amendments at the project site. Make the FDP available upon request by a representative of the AQMD, California Air Resource Board, United States Environmental Protection Agency, or Caltrans. Requests by the public must be directed to the Engineer.

Provide all notices to the AQMD and create and maintain all records as required by Dust Rules. Copies of all related records must be submitted to the Engineer within thirty (30) calendar days of completion of the work.

14-9.04B Materials

Not used.

14-9.04C Construction

Implement the measures contained in the FDP to control dust.

Control dust using measures that include the following:

- 1. Stabilize unpaved areas subject to vehicular traffic by keeping adequately wetted or covered with material that contains less than 0.25 percent asbestos.
- 2. The speed of vehicles and equipment traveling across unpaved areas must not be more than 15 mph unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment going faster from causing dust that is visible from crossing job site limits.
- 3. Stockpiles and disturbed areas not subject to vehicular traffic must be located in the plan and stabilized by being kept adequately wetted or covered with plastic sheeting, bonded fiber matrix, erosion control blanket or other WPC measures approved by the Engineer.
- 4. Conduct activities so that no dirt or mud tracking is visible on any paved roadway open to the public.
- 5. Use rock track out pads and wheel wash stations at all points of egress from unpaved construction areas.
- 6. Use a dedicated water truck for each piece of earthmoving equipment (e.g., scrapers, dozers, excavators, loaders, haul trucks, backhoes, compactors, graders, etc),
- 7. Pre-wet excavations to depths of cuts.

Dust control measures that will be required to mitigate dust may impact your productivity during construction activities.

14-9.04D PAYMENT

The Department does not pay for impacts to your productivity from mitigating dust from your activities.

If naturally occurring asbestos is found within the project limits, prepare an Asbestos Dust Mitigation Plan. Preparing an Asbestos Dust Mitigation Plan and its implementation is change order work.

Payment for preparing, obtaining approval for, revising, and amending the FDP, for AQMD FDP review fees, and for maintaining and submitting all dust control records is paid for under Prepare Fugitive Dust Plan. Payment for performing dust control is not paid for under Prepare Fugitive Dust Plan.

Replace section 14-10.02 with:

14-10.02 SOLID WASTE DISPOSAL AND RECYCLING REPORT

Submit a final solid waste disposal and recycling report (CEM-4401) upon completion of the work and prior to recordation of the Notice of Acceptance. Show the types and amounts of project-generated solid waste, including organic waste, taken to or diverted from landfills or reused on the Project. For failure to submit a completed report, the Department deducts \$1,500.

Add after 2nd paragraph of section 14-11.12A:

This project includes removal of yellow thermoplastic stripe that will produce hazardous waste residue.

Add after the 1st paragraph of section 14-11.12E:

After the Engineer accepts the analytical test results, dispose of yellow thermoplastic and yellow paint hazardous waste residue at a Class 1 disposal facility located in California thirty (30) days after accumulating 220 lb of residue.

If less than 220 lb of hazardous waste residue and dust is generated in total, dispose of it within thirty (30) days after the start of accumulation of the residue.

DIVISION III EARTHWORK AND LANDSCAPE

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17 GENERAL

Add Item 8 to the list in the 2nd paragraph of section 17-2.01:

8. Areas affecting the visibility and line of sight to advanced roadway warning sings

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19 EARTHWORK

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Replace "Not Used" in section 19-1.04 with:

If removal of unsuitable material is described, removing unsuitable material is paid for as the type of excavation involved.

If removal of unsuitable material is not described, removing unsuitable material is paid for as the type of excavation involved, unless before removal activities, (1) removing the material is ordered as change order work or (2) you request the removal to be change order work.

If removal of a buried man-made object is described, payment for removing the object encountered in an excavation is included in the type of excavation involved.

If removal of a buried man-made object is not described, payment for removing a buried man-made object is included in the type of excavation involved, unless before removal activities, (1) removing the object is ordered as change order work or (2) you request the removal to be change order work.

Add to section 19-2.04:

The Department does not pay for an excavation in excess of the limits shown or authorized.

DIVISION V SURFACINGS AND PAVEMENTS

38 HIGH FRICTION SURFACE TREATMENT (HFST)

38-1.01 General

Section 38 includes specifications for the installation of high-friction surface treatment (HFST) on an existing roadway. The installation of HFST consists of spreading resin binder and calcined bauxite aggregate on asphalt concrete surfaces.

Contractor is made aware that the majority of the 15 project locations consist of narrows lanes (<11 ft) and roadways with no shoulders. Contractor shall utilize equipment that will provide a minimum 10 foot wide lane for reversing traffic controls at all times.

38-1.01A Submittals

Contractor must submit a HFST Quality Control Plan (QCP) at least five (5) working days prior to beginning work. Allow the Engineer 5 business days for review.

The HFST QCP must include:

- 1. Assessment of existing pavement conditions, including the need for cleaning and/or sandblasting if determined to be required for sufficient bonding.
- 2. Schedule for the HFST work.
- 3. Description of equipment for placing HFST.
- 4. Description of equipment for measuring, mixing, placing, and finishing HFST.
- 5. Method for protecting areas not to receive HFST.
- 6. Cure time estimates for HFST.
- 7. A correction plan for HFST that fails to meet the coefficient of friction of 0.75. The correction plan may include correction of existing HFST or removal and replacement.
- 8. Storage and handling of HFST components.
- 9. Disposal of excess HFST and containers.
- 10. Contingency plan for possible failure during the HFST application.

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- 11. Name of the certified independent testing laboratory.
- 12. Traffic control plan for application and curing of HFST.

Contractor must submit a material safety data sheet (MSDS) for each shipment of HFST components and a certificate of compliance for the polymer resin binder and calcined bauxite aggregate topping.

Contract shall only allow resin binder and calcined bauxite aggregate topping that have been tested at a certified independent testing laboratory. Contractor must furnish proof of verifications that the materials met all requirements listed in these Specifications, dated no earlier than three (3) months from the time of Contract Award.

38-1.01B Department Acceptance

The Department accepts HFST based on:

- 1. Visual inspection for the following:
 - 1.1. Uniform surface texture
 - 1.2. Raveling, which consists of the separation of the aggregate from the resin binder
 - 1.3. Streaking, which consists of alternating longitudinal bands of resin binder without uniform calcined bauxite aggregate retention, approximately parallel with the lane line
 - 1.4. Flushing, which consists of resin binder without or fully embedded calcined bauxite aggregate.
- 2. The department accepts your test results for compliance with the requirements shown in the following table:

Quality Characteristic	Test Method	Requirement	Minimum Testing Frequency
Bond strength (min, psi)	ASTM C1583	250 psi or 100% substrate failure	1 per day of production
Coefficient of friction at 60 km/h before opening to traffic	ASTM E1911	0.75ª	Minimum of 1 every 500 ft ^b
Coefficient of friction at 60 km/h 7-15 days after opening to traffic	ASTM E1911	0.75ª	Minimum of 1 every 500 ft ^b

^a Report coefficient of friction values at 20 km/h, 40 km/h, 80 km/h.

Replace areas of non-uniform texture, undulations, raveling, streaking, or flushing greater than 0.25 sq ft.

Perform coefficient of friction testing in the presence of the Engineer. Notify the Engineer at least 48 hours before coefficient of friction testing.

38-1.01C Trial HFST Application

Unless otherwise authorized, complete a trial application of HFST at an authorized location before starting HFST production work. Resin binder manufacturer's representative must be present during the trial application

Remove pavement markers and delineation within the area to receive HFST, for the lane and length involved, before placing the resin binder.

The trial HFST application must:

- 1. Be at least 12 feet wide and 20 feet long.
- 2. Be constructed using the same method and equipment as the production work. Construct an additional trial for each method proposed for the production work.

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^b For application lengths < 500 ft, test a minimum of 2 locations

- 3. Replicate field conditions, including ambient and surface temperatures, anticipated for production work.
- 4. Demonstrate surface preparation requirements as outlined in the QC plan.
- 5. Determine the initial set time for the resin binder.

After applying the trial HFST, document:

- 1. Settings on the applicator equipment
- 2. Initial quantities of resin and aggregate topping
- 3. Unused quantities of resin binder and aggregate remaining in the applicator equipment
- 4. Total deck surface treated with HFST

Test the coefficient of friction of the trial HFST under ASTM E1911 at 20, 40, 60, and 80 km/h. If the coefficient of friction of the HFST at 60 km/h is less than 0.75, correct or replace the trial HFST until the coefficient of friction is equal to or greater than 0.75

38-1.02A Materials

38-1.02A(1) Resin Binder

Resin binder must meet the requirements shown in the following table:

Resin Binder Requirements

Treem Email Trequirements										
Quality Characteristic	Test Method	Requirement								
Ultimate Tensile Strength (min, psi)	ASTM D638	2,650								
Type I specimen	ASTIVI DOS6									
Elongation at Break Point (min, %)	ASTM D638	30								
Type I Specimen	ASTIVI DOS6									
Compressive Strength (min, psi at 3 hours)	ASTM C579	1,000								
Water Absorption (max, %)	ASTM D570	1.0								
Durometer hardness (Shore D)	ASTM D2240	65 – 75								
Viscosity ^a (centipoise)	ASTM D2196	1,000 - 3,000								
No. 2 spindle, 10 RPM	ASTWI D2190									
Gel Time (minutes)	ASTM C881	10 – 30								
Cure Rate (max, hrs)		3								
Specimen, 0.05 inch thick, Method A, Dry-Through	ASTM D1640									
Time										
Styrene Content ^b (% by weight)	ASTM D2369	30 – 40								

^a Mix components for resin binder and measure viscosity after 3 minutes

The polyester resin must:

- 1. Be an unsaturated isophthalic polyester-styrene copolymer
- 2. Contain not less than 1 percent by weight gamma-methacryloxypropyltrimethoxysilane, an organosilane ester silane coupler.
- 3. Be used with a promoter compatible with suitable methyl ethyl ketone peroxide and cumene hydroperoxide initiators.

The epoxy-based resin binder must be multi-component.

38-1.02A(2) Calcined Bauxite Aggregate

Calcined bauxite aggregate must be clean, dry, and free from clay and any other deleterious matter and meet the requirements shown in the following table:

Calcined Bauxite Aggregate Requirements

outoniou zuuxitto i tygi oguto i toqui onionto									
Quality Characteristic	Test Method	Requirement							
Los Angeles rattler loss at 100	California Test 211	10							

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^b For polyester resin binder only. Perform test before adding initiator.

Revolutions (max, %)	Table 1, Grading D	
Polish Stone Value (min)	ASTM D3319	38
Aggregate acid insolubility	ASTM D3042	90
Aggregate soundness (max, %)		
Tested with magnesium sulfate solution	ASTM C88	30
Tested with sodium sulfate solution		10
Aluminum oxide content (min, %)	ASTM C25	87
Aggregate moisture content (max, %)	California Test 226	0.2
Sand equivalent (min)	California Test 217	95
Gradation (% passing by weight)		
Sieve size:		
No. 4	California Test 202	100
No. 6		95
No. 16		5

38-1.03 Construction

38-1.03A General

Do not begin HFST production work until authorized after successful completion of the trial HFST.

38-1.03B Surface Preparation

38-1.03B(1) General

Protect utilities, utility covers, drainage structures, curbs and other structure within or adjacent to treatment location from HFST materials using methods outlined in the QC plan.

Surfaces must be clean, dry, and free of any dust, oil, debris, organic matter, or any material that may interfere with the bond between resin binder and existing surfaces.

38-1.03B(2) Asphalt Pavement Surfaces

Perform the following before applying resin binder:

- 1. Remove pavement markers and delineation to a maximum depth of 0.01 foot from the area receiving HFST. Underlying striping exposed during surface preparation must also be removed.
- 2. Sweep the pavement surface
- 3. Blow the surface clean with pressurized air using a minimum 150 cfm compressor fitted with an air lance
- 4. Clean cracks greater than 0.25 inch wide with pressurized air and pretreat with mixed resin binder.

38-1.03C HFST Application

38-1.03C(1) General

Utilize one of the following methods to apply the resin binder and calcined bauxite aggregate, under manufacturer's recommendations:

- 1. Automated continuous application
- 2. Hand mixing and application

Apply mixed resin binder under resin binder manufacturer's recommendations.

Apply resin binder on clean and dry surfaces. Asphalt concrete pavement surface must be at least 30 days old before applying HFST.

Apply polyester resin binder when the surface temperature is 50 to 100 degrees F. Apply epoxy-based resin binder when the surface temperature is at least 50 degrees.

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Apply resin binder at a minimum rate of 0.32 gal/sq yd to one lane width at a time.

Do not allow the mixed resin binder to do any of the following that may impair retention and bonding of aggregate:

- 1. Separate
- 2. Cure
- 3. Dry
- 4. Be exposed
- 5. Harden

Spread calcined bauxite at a minimum rate of 13 lb/sq yd within 5 minutes of applying resin binder.

Cure HFST for a minimum period recommended by the resin binder supplier. During curing period do not allow vehicles, construction equipment, or foot traffic on the HFST.

HFST that has not completely cured after the minimum period recommended by the resin binder supplier is considered nonperforming and must be removed before opening to traffic and replaced.

The surface texture of HFST must be uniform in appearance. Any areas free of HFST must be covered by HFST and cured before opening the area to traffic.

38-1.03C(2) Automated Continuous Application

Perform automated continuous application using an applicator vehicle with the following capabilities:

- 1. Equipped to heat resin binder material
- 2. Continuously mixes, meters, and monitors HFST components during application activities
- 3. Equipped with a built-in data management unit producing real time data showing
 - 3.1. Volume of resin binder applied
 - 3.2. Resin binder spread rate in gal/sq yd.
 - 3.3. Weight of aggregate applied across the application width
- 4. Uses continuous pumping and portioning devices that blend the binder within a controlled system using positive displacement geared pumps
- 5. Mixes the binder with a tolerance of ±2 percent by volume
- 6. Has a non-atomizing laminar extruded application bar tied to the forward motion of the application vehicle through an automated self-contained vehicle drive
- 7. Can apply resin binder and aggregate at the minimum spread rate
- 8. Applies resin binder and aggregate in a continuous pass as 1 layer to a width of up to 12 feet

Clean the mix head and delivery lines if application of the mixed resin binder is stopped for more than 30 minutes.

Apply the aggregate within 6 seconds of the binder application onto the pavement surface from a maximum height of 12 inches.

Replace any exposed sections of uncured resin binder that are contaminated.

Apply additional layers within 4 hours of the previous cured layer.

38-1.03C(3) Hand Mixing and Application

For authorized low volume areas and areas less than 200 square yards, hand mix the resin binder under manufacturer's recommendations. Uniformly spread the resin binder onto the surface using a serrated edge squeegee. Apply calcined bauxite immediately after placing resin binder. Use only authorized footwear if walking on resin binder during calcined bauxite application.

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38-1.03D Excess Aggregate Removal and Reuse

Excess calcined bauxite aggregate must be recovered by a mechanical sweeper and may be reused for HFST. Before reuse of recovered calcined bauxite aggregate, blend with new calcined bauxite aggregate at a rate of 2 to 1 by volume. The recovered calcined bauxite must be clean, dry, and free from clay and any other deleterious material. You may combine new and recycled aggregate as necessary to meet gradation requirements. Provide a record of all recovered calcined bauxite aggregate used and test results. Super sacks or stockpile containing the blended recovered calcined bauxite aggregate must be clearly marked "Recovered Calcined Bauxite Aggregate" and the contract number.

Before opening to traffic, remove excess and loose aggregate from the traveled way and shoulders by sweeping. HFST must be completely cured before sweeping and there must be no damage or dislodging of aggregate from HFST surface. Perform additional sweepings the day following HFST application, 1 week after application and 3 weeks after application. Any additional sweeping beyond what is described in these Special Provisions will be change order work.

38-1.04 Payment

The contract unit price paid per square yard (based on dimensions shown on the plans) of "High-Friction Surface Treatment," shall be considered as full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved in installing the treatment, including: all submittals, all pavement cleaning and preparation (including removal of existing pavement delineation and markers, testing, analysis, and proper disposal of yellow thermoplastic residue), protecting utility and roadway facilities, applying the treatment, testing, protection during curing, all street sweeping, all corrective measures, and all other incidental work required to complete the work as shown and specified.

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DIVISION IX TRAFFIC CONTROL DEVICES

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82 SIGNS AND MARKERS

Add to section 82-3.04:

The contract unit price paid per each of "Roadside Sign – One Post," must be considered as full compensation for furnishing all labor, materials (including sign panels), tools, equipment and incidentals for doing all the work involved in installing all signs, including: all submittals, sign panels, posts, and mounting hardware.

84 MARKINGS

Add to the end of Section 84-2.03A:

Contractor must not install final striping and pavement delineation until at least one (1) week after application of the HFST to allow excess material time to "shed." During this time, temporary pavement delineation must be installed and maintained by Contractor, as discussed in section 12-6.03B of these Special Provisions

Add before the 1st paragraph of section 84-2.03C(2)(e):

Thermoplastic traffic stripes and pavement markings with enhanced wet-night visibility must be installed at all locations.

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Add to the beginning of section 84-9.03B:

Prior to removing existing traffic stripes and pavement markings, contractor is responsible for documenting and recording existing striping patterns (i.e. locations of turn pockets, striping detail changes, pavement marking locations, etc.) for use in re-applying thermoplastic traffic stripes and pavement markings in the same locations and configurations following application of HFST.

Replace section 84-9.04 with:

Payment for removal of existing traffic stripes and pavement markings, including old underlying stripes or markings exposed during surface preparation, are included with the pay item for High Friction Surface Treatment (HFST) as discussed in section 38-1.04 of these Special Provisions.

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Appendix A Revised Standard Specifications

REVISED STANDARD SPECIFICATIONS DATED 04-19-19

ORGANIZATION

Revised standard specifications are under headings that correspond with the main-section headings of the *Standard Specifications*. A main-section heading is a heading shown in the table of contents of the *Standard Specifications*. A date under a main-section heading is the date of the latest revision to the section.

Each revision to the *Standard Specifications* begins with a revision clause that describes or introduces a revision to the *Standard Specifications*. For a revision clause that describes a revision, the date on the right above the clause is the publication date of the revision. For a revision clause that introduces a revision, the date on the right above a revised term, phrase, clause, paragraph, or section is the publication date of the revised term, phrase, clause, paragraph, or section. For a multiple-paragraph or multiple-section revision, the date on the right above a paragraph or section is the publication date of the paragraphs or sections that follow.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the *Standard Specifications* for any other reference to a paragraph of the *Standard Specifications*.

DIVISION I GENERAL PROVISIONS 1 GENERAL

04-19-19

Add between the 1st and 2nd paragraphs of section 1-1.01:

10-19-18

Global revisions are changes to contract documents not specific to a section of the Standard Specifications. In each contract document at each occurrence, interpret the following terms as shown:

Term	Interpretation	Conditions
Fed-Std-595 AMS Std 595		

Add to the table in the 1st paragraph of section 1-1.06:

	04-19-19
CSC	conductor signal cable

Replace the 9th row in the table of section 1-1.11 with:

Department of Conservation, Division of Mine Reclamation

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Add to the table in section 1-1.11:

04-19-19

Data Interchange for Materials Engineering	https://dime.dot.ca.gov	MATERIALS ENGINEERING AND TESTING SERVICES DEPARTMENT OF TRANSPORTATION 5900 FOLSOM BLVD SACRAMENTO CA 95819-4612	(916) 227-5238
SWRCB, Land Disposal Program	https://www.waterboards.ca.gov/wat er_issues/programs/land_disposal/w alist.html		-

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2 BIDDING

10-19-18

Replace the 5th paragraph of section 2-1.12B(1) with:

10-19-18

You are responsible to verify at bid opening the DBE firm is certified as a DBE by the California Unified Certification Program and possesses the most specific available NAICS codes or work codes applicable to the type of work the firm will perform on the Contract.

Replace section 2-1.12B(2) with:

10-19-18

2-1.12B(2) DBE Commitment Submittal

Submit DBE information under section 2-1.33.

Submit a copy of the quote from each DBE shown on the DBE Commitment form that describes the type and dollar amount of work shown on the form no later than 4 p.m. on the 5th day after bid opening. If the last day for submitting the quote falls on a Saturday or holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the 5th day.

Submit a DBE Confirmation form for each DBE shown on the DBE Commitment form to establish that it will be participating in the Contract in the type and dollar amount of work shown on the form. If a DBE is participating as a joint venture partner, submit a copy of the joint venture agreement.

Failure to submit a completed DBE Confirmation form and a copy of the quote from each DBE will result in disallowance of the DBE's participation.

Add between the 4th and 5th paragraphs of section 2-1.15B:

10-19-18

Submit a copy of the quote from each DVBE listed on the Certified DVBE Summary form that describes the type and dollar amount of work shown on the form no later than 4 p.m. on the 4th business day after bid opening.

Add between the 3rd and 4th paragraphs of section 2-1.15C(1):

10-19-18

Submit a copy of the quote from each DVBE listed on the Certified DVBE Summary form that describes the type and dollar amount of work shown on the form no later than 4 p.m. on the 4th business day after bid opening.

Add between the 1st and 2nd paragraphs of section 2-1.18C:

10-19-18

Failure to submit a completed Certified Small Business Listing for the Non–Small Business Preference form by 4 p.m. on the 2nd business day after bid opening will result in a nonresponsive bid.

Replace section 2-1.33B with:

10-19-18

2-1.33B Bid Form Submittal Schedules

2-1.33B(1) General

The *Bid* book includes forms specific to the Contract. The deadlines for the submittal of the forms vary depending on the requirements of each Contract. Determine the requirements of the Contract and submit the forms based on the applicable schedule specified in section 2-1.33B.

Bid forms and information on the form that are due after the time of bid may be submitted at the time of bid.

2-1.33B(2) Federal-Aid Contracts

2-1.33B(2)(a) General

Section 2-1.33B(2) applies to a federal-aid contract.

2-1.33B(2)(b) Contracts with a DBE Goal

2-1.33B(2)(b)(i) General

Section 2-1.33B(2)(b) applies if a DBE goal is shown on the *Notice to Bidders*.

2-1.33B(2)(b)(ii) Bid Form Submittal

Submit the bid forms according to the schedule shown in the following table:

Bid Form Submittal Schedule for a Federal-Aid Contract with a DBE Goal

Form	Submittal deadline
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number
Copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Subcontractor List	Time of bid except for the public works contractor registration number
Copy of the Subcontractor List as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Small Business Status	Time of bid
Opt Out of Payment Adjustments for Price Index Fluctuations ^a	Time of bid
DBE Commitment	No later than 4 p.m. on the 5th day after bid opening ^b
DBE Confirmation	No later than 4 p.m. on the 5th day after bid opening ^b
DBE Good Faith Efforts Documentation	No later than 4 p.m. on the 5th day after bid opening ^b

^aSubmit only if you choose the option.

2-1.33B(2)(b)(iii) Reserved

2-1.33B(2)(c) Contracts without a DBE Goal

2-1.33B(2)(c)(i) General

Section 2-1.33B(2)(c) applies if a DBE goal is not shown on the *Notice to Bidders*.

2-1.33B(2)(c)(ii) Bid Form Schedule

Submit the bid forms according to the schedule shown in the following table:

Bid Form Submittal Schedule for a Federal-Aid Contract without a DBE Goal

rederal-Aid Contract Without a DBE Goal		
Form	Submittal deadline	
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number	
Copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening	
Subcontractor List	Time of bid except for the public works contractor registration number	
Copy of the Subcontractor List as submitted at the time of bid with the public works contractor registration numbers	10 days after bid opening	
Small Business Status	Time of bid	
Opt Out of Payment Adjustments for Price Index Fluctuations ^a	Time of bid	

^aSubmit only if you choose the option.

^bIf the last day for submitting the bid form falls on a Saturday or holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the day specified.

2-1.33B(2)(c)(iii) Reserved

2-1.33B(2)(d)-2-1.33B(2)(h) Reserved

2-1.33B(3) Non-Federal-Aid Contracts

2-1.33B(3)(a) General

Section 2-1.33B(3) applies to non-federal-aid contracts.

2-1.33B(3)(b) Contracts with a DVBE Goal

2-1.33B(3)(b)(i) General

Section 2-1.33B(3)(b) applies if a DVBE goal is shown on the *Notice to Bidders*.

2-1.33B(3)(b)(ii) Bid Form Submittal

Submit the bid forms according to the schedule shown in the following table:

Bid Form Submittal Schedule for a Non-Federal-Aid Contract with a DVBE Goal

Non-Federal-Aid Contract with a DVBE Goal		
Form	Submittal deadline	
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number for a joint-venture contract	
For a joint-venture contract, copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening	
Subcontractor List	Time of bid	
Opt Out of Payment Adjustments for Price Index Fluctuations ^a	Time of bid	
Certified DVBE Summary	No later than 4 p.m. on the 4th business day after bid opening	
California Company Preference	Time of bid	
Request for Small Business Preference or Non– Small Business Preference ^a	Time of bid	
Certified Small Business Listing for the Non– Small Business Preference ^a	No later than 4 p.m. on the 2nd business day after bid opening	

^aSubmit only if you choose the option or preference.

2-1.33B(3)(b)(iii) Reserved

2-1.33B(3)(c) Contracts without a DVBE Goal

2-1.33B(3)(c)(i) General

Section 2-1.33B(3)(c) applies if a DVBE goal is not shown on the *Notice to Bidders*.

2-1.33B(3)(c)(ii) Bid Form Submittal

Submit the bid forms according to the schedule shown in the following table:

Bid Form Submittal Schedule for a Non-Federal-Aid Contract without a DVBE Goal

Form	Submittal deadline
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number for a joint-venture contract
For a joint-venture contract, copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Subcontractor List	Time of bid
Opt Out of Payment Adjustments for Price Index Fluctuations ^a	Time of bid
California Company Preference	Time of bid
Certified DVBE Summary ^b	No later than 4 p.m. on the 4th business day after bid opening
Request for Small Business Preference or Non– Small Business Preference ^a	Time of bid
Certified Small Business Listing for the Non– Small Business Preference ^a	No later than 4 p.m. on the 2nd business day after bid opening

^aSubmit only if you choose the option or preference.

- 2-1.33B(3)(c)(iii) Reserved
- 2-1.33B(3)(d)-2-1.33B(3)(h) Reserved
- 2-1.33B(4)-2-1.33B(9) Reserved

^^^^^

5 CONTROL OF WORK

10-19-18

Replace the 6th paragraph of section 5-1.13B(2) with:

10-19-18

If the Department authorizes the termination or substitution of a listed DBE, make good faith efforts to find another DBE. The substitute DBE must (1) perform at least the same dollar amount of work as the original DBE under the Contract to the extent needed to meet the DBE goal and (2) be certified as a DBE with the most specific available NAICS or work code applicable to the type of work the DBE will perform on the Contract at the time of your request for substitution. Submit your documentation of good faith efforts within 7 days of your request for authorization of the substitution. The Department may authorize a 7-day extension of this submittal period at your request. Refer to 49 CFR 26 app A for guidance regarding evaluation of good faith efforts to meet the DBE goal.

Replace the 2nd sentence in the 2nd paragraph of section 5-1.13C with:

10-19-18

The substitute must be another DVBE, unless DVBEs are not available. The substitute must perform the work originally stated.

Replace the 6th paragraph of section 5-1.13C with:

10-19-18

If a DVBE substitute is not available, requests for substitutions of a listed DVBE must include:

Road Satelyt Indominents/ছাই/কালিঙিক পিন্ধানি দিন Department and the Department of Cetter in Affair Parado Contract No. 5415, CIP No. 72195

Appendix A - RSS May 11, 2021

^bSubmit only if you obtain DVBE participation or you are the apparent low bidder, 2nd low bidder, or 3rd low bidder and you choose to receive the specified incentive.

- 2. Search results from the Department of General Services' website of available DVBEs
- 3. Communication with a DVBE community organization nearest the job site, if applicable
- 4. Documented communication with DVBEs describing the work to be performed, the percentage of the total bid, the corresponding dollar amount, and the responses to the communication

Replace section 5-1.24 with:

10-19-18

5-1.24 CONSTRUCTION SURVEYS

5-1.24A General

The Department places stakes and marks under chapter 12, "Construction Surveys," of the Department's *Surveys Manual*.

Submit your request for Department-furnished stakes:

- 1. Once staking area is ready for stakes
- 2. On a Request for Construction Staking form

After your submittal, the Department starts staking within 2 business days.

Preserve stakes and marks placed by the Department. If the stakes or marks are destroyed, the Department replaces them at the Department's earliest convenience and deducts the cost.

Replace section 5-1.26 with:

10-19-18

5-1.26 RESERVED

Replace item 1.2 in the list in the 1st paragraph of section 5-1.43E(2)(b) with:

10-19-18

1.2. Have completed training by the Department

Replace item 1.2 in the list in the 1st paragraph of section 5-1.43E(3)(b) with:

10-19-18

1.2. Have completed training by the Department

6 CONTROL OF MATERIALS

^^^^

04-19-19 Replace section 6-1.03 with:

04-19-19

6-1.03 LOCAL MATERIALS

6-1.03A General

Local material must be rock, sand, gravel, earth, or mineral material other than local borrow, or selected material obtained or produced from a source in the work vicinity, specifically for use on the project. Local borrow must not be a material from an established commercial source.

Upon your request, the Department tests material for quality characteristics from an untested local source. If satisfactory material from that source is used in the work, the Department does not charge you Roaf Ostale tests of the Ward and the County of El Dorado

Contract No. 5415, CIP No. 72195

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May 11, 2021

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7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

04-19-19

Replace the 6th through 10th paragraphs of section 7-1.02K(3) with:

04-19-19

You may submit certified payroll records electronically using the Department's secure file transfer protocol site. For information on electronic submission of certified payroll records, go to the Department's Division of Construction website.

Submit payroll records electronically in a nonmodifiable PDF file, using the following file-naming convention:

TT-EA-WE-DOCTYPE.PDF

where:

TT = district, leading zero

EA = Contract number, excluding the district identification number, expressed as 6 characters

WE = week ending date entered as month, leading zero; day of month, leading zero; year, last 2 digits

DOCTYPE = labor payroll document type, CP for Certified Payroll, FB for Fringe Benefit Statement, or SC for Statement of Compliance

Before submitting the payroll records electronically, you and your subcontractors must each complete and sign the Request for Electronic Submission of Certified Payroll Records and e-mail it in PDF format to the district Labor Compliance Office. The Department provides you and your subcontractors' assigned representatives the accounts and user identifications by e-mail after each Request for Electronic Submission of Certified Payroll Records is received.

Each electronic submission must:

- 1. Include certified payroll records in a nonmodifiable PDF file
- 2. Include a signed Statement of Compliance form with each weekly record as a nonmodifiable PDF file
- 3. Be received by the Department by close of business on the 15th day of the month for the prior month's work

Replace the 1st sentence in the 5th paragraph of section 7-1.02K(6)(a) with:

10-19-18

Submit copies of your Injury and Illness Prevention Program, Code of Safe Practices, and permits required by Cal/OSHA as informational submittals.

Replace Reserved in section 7-1.02M(2) with:

04-19-19

Submit the names and emergency telephone numbers of the nearest fire suppression agencies before the start of job site activities as an informal submittal. Post the names and phone numbers at a prominent place at the job site.

Cooperate with fire prevention authorities in performance of the work.

Immediately report fires occurring within and near the project limits by dialing 911 and to the nearest fire suppression agency by using the emergency phone numbers retained at the job site.

Road resemble transfer ting apen fires that are not part of the work. Contract No. 5415, CIP No. 72195
May 11, 2021

County of El Dorado Appendix A - RSS AA-8 Prevent the escape of and extinguish fires caused directly or indirectly by job site activities.

Replace the 2nd paragraph of section 7-1.02M(3) with:

04-19-19

For the list of permitted sites, go to the Department of Conservation, Division of Mine Reclamation website.

8 PROSECUTION AND PROGRESS

04-19-19

Replace the row for *Safety* in the table in the 2nd paragraph of section 8-1.03 with:

10-19-18

Safety	Injury and Illness Prevention Program, Code of Safe Practices,
	and job site posters

Replace item 3 in the list in the 3rd paragraph of section 8-1.07C with:

04-19-19

3. Delay days exclude Saturdays and holidays.

Replace section 8-1.14E with:

04-19-19

8-1.14E Payment Adjustment for Termination

If the Department issues a termination notice, the Engineer determines the payment for termination based on the following:

- 1. Direct cost for the work performed:
 - 1.1. Including:
 - 1.1.1. Mobilization.
 - 1.1.2. Demobilization.
 - 1.1.3. Securing the job site for termination.
 - 1.1.4. Losses from the sale of materials.
 - 1.2. Not including:
 - 1.2.1. Cost of materials you keep.
 - 1.2.2. Profit realized from the sale of materials.
 - 1.2.3. Cost of material damaged by:
 - 1.2.3.1. Act of God.
 - 1.2.3.2. Act of a public enemy.
 - 1.2.3.3. Fire.
 - 1.2.3.4. Flood.
 - 1.2.3.5. Governor-declared state of emergency.
 - 1.2.3.6. Landslide.
 - 1.2.3.7. Tsunami.
 - 1.2.4. Other credits.
- 2. Cost of remedial work, as estimated by the Engineer, is not reimbursed.
- 3. Allowance for profit not to exceed 4 percent of the cost of the work performed where a likelihood of having made a profit had the Contract not been terminated is shown.
- 4. Material handling costs for material returned to the vendor or disposed of as ordered.
- 5. Costs in determining the payment adjustment due to the termination, excluding attorney fees and Road Sainty പ്രവാദ Locations County of El Dorado

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6. Overhead costs.

Termination of the Contract does not relieve the surety of its obligation for any just claims arising out of the work performed.

^^^^^

9 PAYMENT

04-19-19

Replace section 9-1.07B(5) with:

10-19-18

9-1.07B(5) Hot Mix Asphalt Containing Reclaimed Asphalt Pavement

The Engineer calculates the quantity of asphalt in HMA containing RAP using the following formula:

Qrap = HMARTT x Xaa

where:

 $Xaa = Xta - [(Xrap \times Xra \times (Xta-100)) / (100 \times (Xra - 100))]$

and:

Qrap = quantity in tons of asphalt used in HMA containing RAP

HMARTT = HMA containing RAP, total tons placed

Xaa = asphalt content of HMA containing RAP adjusted to exclude the asphalt content in RAP, expressed as a percentage of the total weight of HMA containing RAP

Xta = total theoretical asphalt content in HMA containing RAP from the job mix formula, expressed as a percentage of the total weight of HMA containing RAP

Xrap = RAP percentage in HMA containing RAP from the job mix formula, expressed as a percentage of the total dry weight of aggregate in HMA containing RAP

Xra = average asphalt content of RAP from the job mix formula, expressed as percentage of total weight of RAP

Replace the 2nd sentence in the 7th paragraph of section 9-1.11E with:

04-19-19

The cost is determined under section 9-1.05 except no markup is allowed.

Replace section 9-1.16C with:

10-19-18

9-1.16C Materials On Hand

A material on hand but not incorporated into the work is eligible for a progress payment if:

- 1. Compliant with other Contract parts
- 2. Material cost exceeds either of the following:
 - 2.1. \$50,000
 - 2.2. \$25,000 if the requestor is certified as one or more of the following:
 - 2.2.1. DVBE
 - 2.2.2. DBE
 - 2.2.3. Small business as certified by Department of General Services, Office of Small Business and Disabled Veteran Business Enterprise Services
- 3. Purchased
- 4. Invoice is submitted
- 5. Stored within the State and you submit evidence that the stored material is subject to the

Department's control
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- 7. Water pollution control measures are established and maintained
- 8. Requested on the Department-furnished form

Replace item 4 in the list in the 4th paragraph of section 9-1.17D(2)(b) with:

04-19-19

- 4. Within 30 days of receiving the proposed final estimate, submit an audit report prepared by an independent CPA for the performance period from contract approval date to contract acceptance date, including:
 - 4.1. Calculations with supporting documentation of actual home office and project field overhead costs
 - 4.2. Calculations specifying the actual daily rates for both field and home office overhead, not including a profit markup, for the entire duration of the project expressed as a rate per working day
 - 4.3. Calculations of your actual field and home office overhead daily rates using the Eichleay Formula calculation based on the performance period, number of working days, overhead cost pools, and all allocation bases from contract and company revenues

Replace the 3rd sentence in the 6th paragraph of section 9-1.17D(2)(b) with:

04-19-19

The attest documentation prepared by the CPA in connection with the audit must be submitted for review with the audit report.

DIVISION II GENERAL CONSTRUCTION 10 GENERAL

^^^^^^

04-19-19

Replace the 1st sentence in the 4th paragraph of section 10-6 with:

04-19-19

The sources and discharge of recycled water must comply with the water-recycling criteria of the CDPH, SWRCB Order No. WQ 2016-0068-DDW, and the requirements of the appropriate RWQCB.

11 WELDING

^^^^^

04-19-19

Replace the table in the 3rd paragraph of section 11-1.01 with:

04-19-19

AWS code	Year of adoption
D1.1	2015
D1.3	2018
D1.4	2018
D1.5	2015
D1.6	2017
D1.8	2016

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Replace the introductory clause in the 1st paragraph of section 11-1.03 with:

04-19-19

Replace clause 6.1.3 of AWS D1.1, the 1st paragraph of clause 9.1.2 of AWS D1.4, and clause 6.1.2 of AWS D1.5 with:

Replace the introductory clause of the 2nd paragraph of section 11-1.04 with:

04-19-19

Replace clause 6.14.6.1 of AWS D1.1, clause 9.8.1 of AWS D1.4, and clause 6.1.3.4 of AWS D1.5 with:

Add before the 1st paragraph of section 11-1.05:

04-19-19

Replace the first sentence of clause 5.21.1.1 of AWS D1.1 with the following:

5.21.1.1. The separation between surfaces of plug and slot welds, and of joints landing on a backing, shall not exceed 1/16 in [2 mm].

Replace clause 3.3.1.1 of AWS D1.5 with the following:

3.3.1.1. The separation between surfaces of plug and slot welds, and of joints landing on a backing, shall not exceed 2 mm [1/16 in].

Replace item 2 in the list in the 2nd paragraph of section 11-1.05 with:

04-19-19

Be mechanically and radiographically tested. Mechanical and radiographic testing and acceptance criteria must comply with the applicable AWS codes. The type of mechanical testing must be authorized.

Replace the 1st paragraph of 11-1.06 with:

04-19-19

Replace item 3 of clause 6.26.3.2 of AWS D1.5 with:

3. If indications that exhibit these planar characteristics are present at scanning sensitivity, or other evidence exists to suggest the presence of transverse cracks, a more detailed evaluation of the discontinuity by other means must be performed (e.g., alternate UT techniques, RT, grinding, or gouging for visual inspection or MT of the excavated areas.)

Replace the scanning angle in clause 6.24.2.2 of AWS D1.5 with:

Up to 45 degrees

Replace the 2nd paragraph of section 11-1.06 with:

04-19-19

Clause 6.6.5 of AWS D1.1, clause 9.6.5 of AWS D1.4, and clause 6.6.5 of AWS D1.5 do not apply.

Replace the introductory clause of the 1st paragraph of section 11-2.04 with:

04-19-19

Clauses 6.1.4.1 and 6.1.4.3 of AWS D1.1, the 2nd paragraph of clause 9.1.2 of AWS D1.4, clauses 6.1.3.1 through 6.1.3.3 of AWS D1.5, and clause 7.2.3 of AWS D1.8 are replaced with:

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

Replace item 2 in the list in the 2nd paragraph of section 11-2.04 with:

04-19-19

 Structural steel for building construction work is performed at a permanent fabrication or manufacturing plant that is certified under the AISC Quality Certification Program, Category BU, Standard for Steel Building Structures.

Replace section 11-2.06 with:

04-19-19

11-2.06 WELDING PROCEDURES QUALIFICATION

Welding procedures qualification for work welded under AWS D1.5 must comply with clause 5.12 or 5.12.4 of AWS D1.5 and the following:

- Macroetch tests are required for all WPS qualification tests, and acceptance must comply with clause 5.19.3 of AWS D1.5.
- 2. If a nonstandard weld joint is to be made using a combination of WPSs, you may conduct a test under figure 5.3, combining the qualified or prequalified WPSs to be used in production, if the essential variables, including weld bead placement, of each process are limited to those established in table 5.4 of AWS D1.5.
- 3. Before preparing mechanical test specimens, inspect the PQR welds by visual and radiographic tests. The backing bar must be 3 inches in width and must remain in place during NDT. Results of the visual and radiographic tests must comply with clause 6.26.2 of AWS D1.5 excluding clause 6.26.2.2. All other requirements for clause 5.17 are applicable.

When electric resistance welding is used for work welded under AWS D1.1, the welding procedure must be qualified under Clause 4 of AWS D1.1. Welding procedures must be qualified for the thickness and the pole diameter tested. Test samples for tapered poles must be obtained from three locations, each end and the middle of the tapered pole, to qualify for the diameter range tested.

Replace the 3rd paragraph of section 11-3.02 with:

04-19-19

The AISC Certification category for pole structures is Bridge and Highway Metal Component (CPT) or Standard for Steel Building Structures (BU).

^^^^^

12 TEMPORARY TRAFFIC CONTROL

04-19-19 **Replace section 12-3.21B with:**

04-19-19

Temporary traffic screen panels must be one of the following:

- 1. CDX grade or better plywood
- 2. Weather-resistant strand board
- 3. Plastic

Plastic temporary traffic screen panels must be on the Authorized Material List for temporary traffic screen.

Wale boards for use with plywood or strand board must be Douglas fir, rough sawn, construction grade or better.

Pipe screen supports must be schedule 40, galvanized steel pipe.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

Nuts, bolts, and washers must be cadmium plated.

Screws must be black or cadmium-plated flat head, cross-slotted, with full-thread length.

Replace section 12-3.33 with:

04-19-19

12-3.33 TEMPORARY SIGNAL SYSTEMS

12-3.33A General

Section 12-3.33 includes specifications for installing, maintaining, and removing temporary signal systems, including installing lighting and flashing beacons for traffic control.

Temporary signal systems must comply with section 87-20.

12-3.33B Materials

Not Used

12-3.33C Construction

If the temporary signal system is out of operation, provide flaggers to control the traffic until the traffic signals are in operation.

12-3.33D Payment

Not Used

Replace section 12-4.01C with:

10-19-18

Not Used

Replace the 3rd paragraph of section 12-4.02C(2)(a) with:

10-19-18

Within 5 business days after completion of the training, the Department provides LCS accounts and user IDs to your assigned, trained representatives.

Replace the list in the 1st paragraph of section 12-4.02C(7)(d) with:

10-19-18

- Installation, removal, or replacement of an overhead power line or other utility cable across the highway
- 2. Installation or removal of traffic control devices in areas without a standard-width shoulder
- 3. Transportation of large equipment across the highway
- 4. Access to median areas for workers or equipment

^^^^^

13 WATER POLLUTION CONTROL

04-19-19

Add after the 2nd paragraph of section 13-1.01C(5):

04-19-19

For partial listing of disposal facilities and their waste acceptance list, go to SWRCB website.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

Delete item 2.6.3 in the list of section 13-1.01D(4)(c).

Replace the 1st paragraph of section 13-2.01C with:

04-19-19

Within 7 days after Contract approval, submit one printed copy and an electronic copy on a read-only CD, DVD, or other authorized data-storage device of your WPCP unless different quantities are ordered at the preconstruction conference. You may assign a QSP other than the WPC manager to develop the WPCP.

Replace item 4 in the list in the 2nd paragraph of section 13-2.01C with:

04-19-19

- 4. Show the locations and types of temporary WPC practices that will be used in the work for whichever has the longest duration in the first:
 - 4.1. 60 days
 - 4.2. Construction phase

Replace the 4th paragraph of section 13-2.01C with:

04-19-19

After the Engineer authorizes the WPCP, submit one printed copy and an electronic copy on a read-only CD, DVD, or other Engineer-authorized data-storage device of the authorized WPCP.

04-19-19

Delete the row for Annual Certification in the table in section 13-3.01C(1).

Replace the 1st paragraph of section 13-3.01C(2)(a) with:

04-19-19

Within 15 days of Contract approval, submit one printed copy and an electronic copy on a read-only CD, DVD, or other authorized data-storage device of your SWPPP unless different quantities are ordered at the preconstruction conference. You may assign a QSD other than the WPC manager to develop the SWPPP.

Replace item 4 in the list in the 2nd paragraph of section 13-3.01C(2)(a) with:

04-19-19

- 4. Include a schedule showing when:
 - 4.1. Work activities that could cause the discharge of pollutants into stormwater will be performed
 - 4.2. WPC practices, including soil stabilization and sediment control, that will be used in the work for whichever has the longest duration in the first:
 - 4.2.1. 60 days
 - 4.2.2. Construction phase

Replace the 4th paragraph of section 13-3.01C(2)(a) with:

04-19-19

Submit an electronic copy on a read-only CD, DVD, or other Engineer-authorized data-storage device and 4 printed copies of the authorized SWPPP unless fewer quantities are authorized at the preconstruction conference.

Road Safety Replace the istandurators Localism in the 7th paragraph of section 13-3 of G(2) (a) evide ado Contract No. 5415, CIP No. 72195

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AA-15

Submit a revised SWPPP annually before September 15th and any time:

Add after the 7th paragraph of section 13-3.01C(2)(a):

04-19-19

Revise the SWPPP through amendment. The annual SWPPP amendment must include an annual winterization plan.

The annual winterization plan must describe the preparation for the upcoming rainy season including:

- 1. Updated schedule
- 2. Materials and labor
- 3. Management of stormwater through the job site including:
 - 3.1. Run-on
 - 3.2. Run-off
 - 3.3. Conveyance downslope
- 4. Management of areas within the job site including:
 - 4.1. Areas where work is suspended
 - 4.2. Areas of soil stabilization
 - 4.3. New disturbed soil areas
- 5. Changes to monitoring locations
- 6. Slope stabilization

04-19-19

Delete section 13-3.01C(5).

^^^^^

14 ENVIRONMENTAL STEWARDSHIP

04-19-19

Add between the 3rd and 4th paragraphs of section 14-10.01:

04-19-19

If ordered, remove solid waste from illegal dumping on the project site. This work is change order work. Illegal dumping is:

- 1. Third party nonhazardous residential or commercial waste
- 2. Greater than 1.0 cubic yard per event

Add to the beginning of section 14-11.14D:

04-19-19

Store treated wood waste at the jobsite until transport to the CA permitted disposal site.

Add to the beginning of section 14-11.14E:

04-19-19

Transport treated wood waste directly to the CA permitted disposal site after leaving the jobsite. Do not mix treated wood waste from the job site with waste from any other generator.

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DIVISION III EARTHWORK AND LANDSCAPE 19 EARTHWORK

10-19-18

Replace the 1st paragraph of section 19-3.03E(1) with:

10-19-18

Place structure backfill in uniform layers. Bring backfill up uniformly on all sides of structures or drainage facilities. Backfill layer thickness must not exceed 0.67 foot before compacting. If you perform compaction by ponding and jetting, the thickness of the backfill layer must not exceed 4 feet.

Replace the 1st sentence in the 3rd paragraph of section 19-3.03E(1) with:

10-19-18

Do not place structure backfill until footings or other parts of structures or drainage facilities are authorized.

20 LANDSCAPE

04-19-19

Replace the 2nd paragraph of section 20-2.01A(4)(d) with:

10-19-18

In the presence of the Engineer, perform a functional test for each system that demonstrates:

- 1. Components of the system are functioning and integrated with one another.
- 2. Controller programming is complete including external weather and other system data inputs that are required to operate the system in automatic mode.
- 3. Watering schedule is appropriate for the plants, current weather, season, and site conditions.
- 4. System has complete sprinkler coverage of the site.

Perform the test for each system:

- 1. Before planting the plants
- 2. After irrigation system repair work
- 3. Annually during plant establishment work
- 4. Not more than 30 days prior to contract acceptance
- 5. When ordered

10-19-18

Delete section 20-2.01A(4)(e).

Replace the 1st paragraph of section 20-2.01B(5) with:

10-19-18

Pull boxes must comply with section 86-1.02C and be no. 5 or larger. Pull boxes for low voltage conductors must not have side openings.

Replace the 2nd paragraph of section 20-2.01B(5) with:

04-19-19

Pull box covers used for control and neutral conductors for irrigation equipment operated by the irrigation controller must be marked *SPRINKLER CONTROL*.

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Add to section 20-2.01B:

04-19-19

20-2.01B(9) Woven Wire Cloth and Gravel

Woven wire cloth must be galvanized and manufactured with a minimum diameter of 19-gauge wire and have square openings from 1/4 to 1/2 inches.

Gravel must be 3/4-inch gravel or crushed rock. Gravel or crushed rock must be clean, washed, dry, and free from clay or organic material.

Replace the 1st paragraph of section 20-2.01C(2) with:

10-19-18

Perform trenching and backfilling under section 87-1.03E(2).

Replace the introductory clause to the list in the 1st paragraph of section 20-2.01C(3) with:

10-19-18

Install pull boxes under section 87-1.03C at the following locations:

Add to section 20-2.01C(4):

04-19-19

Install valve boxes on woven wire cloth and gravel or crushed rock.

Replace the 1st paragraph of section 20-2.04A(4) with:

10-19-18

Perform field tests on control and neutral conductors. Field tests must comply with the specifications in section 87-1.01D(2)(a).

Replace the 1st and 2nd paragraphs of section 20-2.04B with:

10-19-18

Control and neutral conductors must comply with the provisions for conductors and cables in section 86-1.02F.

Electrical conduit and fittings must comply with section 86-1.02(B).

Replace the 1st paragraph of section 20-2.04C(4) with:

04-19-19

Splice conductors with a UL-listed connector manufactured for copper wire, direct burial irrigation systems. Connector must be prefilled with a moisture sealing compound that encapsulates and protects the splice in a waterproof housing. Connector must be sized for the number and gauge of the conductors at the splice.

Replace the introductory clause of the 1st paragraph of section 20-2.06B(3) with:

10-19-18

The irrigation controller enclosure cabinet must comply with section 86-1.02Q and must:

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10-19-18

Install the irrigation controller enclosure cabinet under 87-1.03Q(1).

Replace the 3rd paragraph of section 20-2.09B(1) with:

04-19-19

Threaded nipples for swing joints and risers must be schedule 80, PVC 1120 or PVC 1220 pipe, and comply with ASTM D1785.

Replace the table in the 3rd paragraph of section 20-3.01B(2)(a) with:

10-19-18

Plant group designation	Description	Container size (cu in)
Α	No. 1 container	152–251
В	No. 5 container	785–1242
С	Balled and burlapped	
E	Bulb	
F	In flats	
Н	Cutting	
I	Pot	
K	24-inch box	5775–6861
М	Linera	
0	Acorn	
Р	Plugs ^{a, b}	
S	Seedling ^c	
U	No. 15 container	2768-3696
Z	Palm Tree	

^aDo not use containers made of biodegradable material.

Replace the introductory clause of the 1st paragraph of section 20-3.01B(4)(b) with:

10-19-18

Slow-release fertilizer must be a pelleted or granular form with a nutrient release over a 3 to 4 month period and be within the chemical analysis ranges shown in the following table:

Replace section 20-3.01C(3) with:

10-19-18

Water plants as needed to keep the plants in a healthy growing condition.

Replace the 1st paragraph of section 20-4.03G with:

10-19-18

Operate the electric automatic irrigation systems, including external weather and other system data inputs required to operate the system in automatic mode, unless otherwise authorized.

10-19-18

Delete the 3rd paragraph of section 20-4.03G.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

^bGrown in individual container cells.

cBare root.

Add to the end of section 20-5.03B(3):

10-19-18

If you are ordered to remove existing concrete below ground within the limits of the rock blanket, saw cut the concrete before removal. This work is change order work.

Replace item 1 in the list in the 1st paragraph of section 20-10.03A(3) with:

10-19-18

1. Transplanting trees. The work plan must include methods of lifting, transporting, storing, planting, guying, watering and maintaining each tree to be transplanted. Include the root ball size, method of root ball containment, and a maintenance program for each tree.

Add to the end of section 20-10.03C(3):

10-19-18

Water transplanted trees immediately after planting and as needed to keep it in a healthy growing condition until contract acceptance.

Add to the end of section 20-10.03C(4):

10-19-18

Water existing plants as needed to keep them in a healthy growing condition until contract acceptance.

^^^^^

21 EROSION CONTROL

04-19-19

Replace the 2nd paragraph of section 21-2.03J with:

04-19-19

Do not incorporate materials within 3 feet of the pavement edge.

04-19-19

Delete the 4th paragraph of section 21-2.03J

^^^^^^

DIVISION IV SUBBASES AND BASES 28 CONCRETE BASES

04-19-19

Replace the 1st paragraph of section 28-2.01D(1)(a) with:

04-19-19

The cylinders for compressive strength testing under ASTM C31 or ASTM C192 must be 6 by 12 inches.

Replace the 1st paragraph of section 28-2.02B with:

04-19-19

The SCM content requirements in the 4th paragraph of section 90-1.02B(3) do not apply to LCB.

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DIVISION V SURFACINGS AND PAVEMENTS 39 ASPHALT CONCRETE

^^^^^^^^^

04-19-19

Replace the 1st and 2nd paragraphs of section 39-2.01A(3)(d) with:

04-19-19

If ordered, submit QC test results within 3 business days of a request.

Add to section 39-2.01A(4)(h)(v):

04-19-19

AASHTO T 324 (modified) and AASHTO T 283 are not required if production start-up evaluation is within 45 days of the date the Hot Mix Asphalt Verification form is signed.

If production stops for more than 60 days, perform a production start-up evaluation. If production stops for more than 30 days but less 60 days, perform a reduced production start-up evaluation. Reduced production start-up evaluation is production start-up evaluation without AASHTO T 324 and AASHTO T 283.

If production start-up evaluation fails, do not begin production.

Add between the 3rd and 4th paragraphs of section 39-2.01A(4)(i)(i):

04-19-19

You must assist in collecting Engineer acceptance samples. Sample in the presence of the Engineer. Split the Engineer acceptance samples into at least 4 parts. Engineer retains 3 parts and you keep 1 part.

Replace the 1st through 3rd paragraphs of section 39-2.01A(4)(i)(iv) with:

04-19-19

You and the Engineer must work together to avoid potential conflicts and to resolve disputes regarding test result discrepancies. You and the Engineer may only dispute each other's test results if one party's test results pass and the other party's test results fail.

If there is a dispute, submit your test results and copies of paperwork including worksheets used to determine the disputed test results within 3 business day of receiving Engineer's test results. An independent third party performs referee testing. Before the third party participates in a dispute resolution, it must be qualified under AASHTO re:source program and the Department's Independent Assurance Program. The independent third party must have no prior direct involvement with this Contract. By mutual agreement, the independent third party is chosen from:

- 1. Department laboratory in a district or region not in the district or region the project is located
- 2. Transportation Laboratory
- 3. Laboratory not currently employed by you or your HMA producer

If the Department's portion of the split acceptance samples are not available, the independent third party uses any available material agreed by you and the Engineer as representing the disputed HMA for evaluation.

Replace the row for *Moisture susceptibility (min, psi, dry strength)* in the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e) with:

04-19-19

For RAP substitution equal to or less than 15%	AASHTO T 283	100
moisture susceptibility (min, psi, dry strength)		100
For RAP substitution greater than 15%	AASHTO T 283	100-300 ^h
moisture susceptibility (psi, dry strength)		100-300

Add a footnote to the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e):

04-19-19

^hNot required in the following areas:

- 1. Southern San Luis Obispo or Santa Barbara County in District 5.
- 2. Kern County in District 6.
- 3. Kings County in District 6: route 5, post mile 0 to 17; route 33, post mile 0 to 19; route 41, post mile 0 to 16.
- 4. Tulare County in District 6: route 65, post mile 0 to 10; route 99, post mile 0 to 10; route 43, post mile 0 to 15.

Replace the row for *Moisture susceptibility, dry strength* in the table in the 1st paragraph of section 39-2.02B(2) with:

04-19-19

For RAP substitution equal to or less than 15% moisture susceptibility (min, psi, dry strength)	AASHTO T 283	100
For RAP substitution greater than 15% moisture susceptibility (psi, dry strength)	AASHTO T 283	100-300°

Add a footnote to the table in the 1st paragraph of section 39-2.02B(2):

04-19-19

^eNot required in the following areas:

- 1. Southern San Luis Obispo or Santa Barbara County in District 5.
- 2. Kern County in District 6.
- 3. Kings County in District 6: route 5, post mile 0 to 17; route 33, post mile 0 to 19; route 41, post mile 0 to 16.
- 4. Tulare County in District 6: route 65, post mile 0 to 10; route 99, post mile 0 to 10; route 43, post mile 0 to 15.

Replace the 3rd and 4th paragraphs of section 39-2.02B(2) with:

04-19-19

For RAP substitution of 15 percent or less, the grade of the virgin binder must be the specified grade of asphalt binder for Type A HMA.

For RAP substitution greater than 15 percent and not exceeding 25 percent, the grade of the virgin binder must be the specified grade of asphalt binder for Type A HMA with the upper and lower temperature classification reduced by 6 degrees C. Hamburg wheel track requirements are based on the grade of asphalt binder specified for Type A HMA.

Replace the 2nd sentence in the 2nd paragraph of section 39-2.02B(11) with:

04-19-19

For RAP substitution of 15 percent or less, RAP must be within ±3 of RAP percentage shown in your Contractor Job Mix Formula Proposal form without exceeding 15 percent. For RAP substitution of greater than 15 percent, RAP must be within ±3 of RAP percentage shown in your Contractor Job Mix Formula Proposal form without exceeding 25 percent.

Replace the 8th and 9th paragraphs of section 39-2.04C with:

04-19-19

For RHMA-O and RHMA-O produced with WMA water injection technology, and RHMA-O-HB and RHMA-O-HB produced with WMA water injection technology:

- 1. Spread and compact if the ambient air temperature is at least 55 degrees F and the surface temperature is at least 60 degrees F
- 2. Complete the 1st coverage using 2 rollers before the surface temperature drops below 280 degrees F
- 3. Complete compaction before the surface temperature drops below 250 degrees F

For RHMA-O produced with WMA additive technology and RHMA-O-HB produced with WMA additives technology:

- 1. Spread and compact if the ambient air temperature is at least 45 degrees F and the surface temperature is at least 50 degrees F
- 2. Complete the 1st coverage using 2 rollers before the surface temperature drops below 270 degrees F
- 3. Complete compaction before the surface temperature drops below 240 degrees F

Spread sand at a rate from 1 to 2 lb/sq yd on RHMA-O and RHMA-O-HB with or without WMA technology pavement after finish rolling activities are complete. Keep traffic off the pavement until spreading of the sand is complete.

^^^^^^

40 CONCRETE PAVEMENT

10-19-18

Replace the 2nd paragraph of section 40-1.01C(9) with:

10-19-18

Submit your coefficient of thermal expansion test data at:

https://dime.dot.ca.gov/

DIVISION VI STRUCTURES
46 GROUND ANCHORS AND SOIL NAILS

04-19-19

^^^^^^

Add to the list in the 1st paragraph of section 46-1.01C(3):

10-19-18

12. Digital photo logs of extracted test soil nails

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Replace the 2nd paragraph of section 46-1.01C(3) with:

10-19-18

Submit the test data in electronic and hard copy format within 1 business day after testing is complete. Upon completion of the wall, send an email of the soil nail test results as a tabulated spreadsheet to the Engineer and Geotechnical.Data@dot.ca.gov. Include the contract number and Department's structure number of the wall in the subject line of the email.

Replace Not Used in section 46-1.01D(1) with:

10-19-18

Welding must comply with AWS D1.1.

Add to the end of section 46-1.03A:

10-19-18

Shotcrete must comply with section 53-2.

10-19-18

Delete the 3rd paragraph of section 46-1.03B.

Replace the 1st sentence in the 2nd paragraph of section 46-2.02B with:

10-19-18

The anchorage enclosure and the steel tube and bearing plate of the anchorage assembly must be galvanized steel and comply with sections 55-1.02D(1) and 55-1.02E(1).

Replace item 9 in the list in the 3rd paragraph of section 46-2.02D with:

10-19-18

9. Have the physical properties shown in Table 4.1 of *Recommendations for Prestressed Rock and Soil Anchors* published by the Post-Tensioning Institute

Replace the 4th paragraph of section 46-2.03D with:

10-19-18

Immediately after lock-off, perform a lift-off test to verify that the lock-off load has been attained. The lift-off load must be within 10 percent of the specified lock-off load. If necessary adjust the shim thickness to achieve the lock-off load. If the load is not within 10 percent of the specified lock-off load, the anchorage must be reset and another lift-off load reading must be made. Repeat the process until the specified lock-off load is obtained.

Replace the 2nd paragraph of section 46-3.01A with:

10-19-18

A soil nail consists of a solid steel bar with an anchorage assembly that is placed in a drilled hole and then grouted.

Replace section 46-3.01D(2)(b)(ii)(1) with:

10-19-18

46-3.01D(2)(b)(ii)(1) General

Determine the test load using the following equation: Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

 $T = Lb \times Qb$

where:

T = test load, pounds Lb = soil nail bonded length, feet, 10 feet minimum Qb = test load per unit length of bond, pounds/foot

Replace the 8th paragraph of section 46-3.01D(2)(b)(ii)(2) with:

04-19-19

If the Engineer revises soil nail lengths or test load per unit length of bond values, any additional verification test soil nails are change order work.

Replace section 46-3.02A with:

04-19-19

46-3.02A General

Each production soil nail must be either a solid steel bar encapsulated full length in a grouted corrugated plastic sheathing or an epoxy-coated prefabricated solid steel bar partially encapsulated in a grouted corrugated plastic sheathing as shown.

Epoxy-coated prefabricated solid steel bars must comply with the specifications for epoxy-coated prefabricated reinforcement in section 52-2.03, except the average coating thickness after curing must be from 10 to 15 mils.

Solid steel bar for test soil nails is not required to be epoxy coated or encapsulated in grouted plastic sheathing.

Replace the heading of section 46-3.02B with:

10-19-18

Anchorage Assemblies

Replace section 46-3.02C with:

10-19-18

46-3.02C Solid Steel Bars

Solid steel bars must be either:

- 1. Threaded bars with spirally-deformed, ribbed threads continuous along the entire length of the bar.
- 2. Deformed reinforcing bars with at least a 6-inch length of thread cut into the bar on the anchorage end. Use coarse threading and the next larger reinforcing bar size.

Solid steel bars must comply with ASTM A615/A615M or A706/A706M, Grade 60 or ASTM A615/A615M, Grade 75.

Splicing must be authorized.

Epoxy coating at the anchorage end of epoxy-coated bars may be omitted for a maximum of 6 inches. Metal surfaces of assembled splices of epoxy-coated bars must be epoxy coated.

Choose the solid steel bar size and grade for test soil nails. Test soil nail bars must not be smaller than the production soil nails they represent.

Replace the 1st paragraph of section 46-3.03A with:

10-19-18

Determine the drilled-hole diameter and installation method required to achieve the test load per unit length of bond values shown.

Replace the introductory clause to the list in the 3rd paragraph of section 46-3.03B with:

10-19-18

Install verification test soil nails by any of the following means:

Replace the 7th and 8th paragraphs of section 46-3.03B with:

10-19-18

Remove each verification and proof test soil nail to 6 inches behind the front face of the shotcrete after testing is complete. Fill the voids with grout.

If ordered, extract verification and proof test soil nails selected by the Engineer. Fill the voids with grout. Photograph the extracted test nails in 5-foot section intervals.

Replace the 3rd paragraph of section 46-3.03C with:

10-19-18

Splice the solid steel bar only where shown on the authorized shop drawings or at the end of a soil nail that is ordered to be lengthened.

Replace the 1st sentence in the 7th paragraph of section 46-3.03C with:

10-19-18

Hand tighten the nut on the end of the production soil nail bar before shotcrete hardening begins. Ensure the bearing plate is fully seated on the shotcrete.

^^^^^

48 TEMPORARY STRUCTURES 10-19-18 Add to the end of section 48-1.01:

10-19-18

Falsework, temporary supports and jacking support systems must comply with any additional requirements of the railroad company involved.

Add to section 48-2.01B:

10-19-18

Falsework release: Lowering of falsework to the point that it no longer supports the loads imposed by the permanent structure, or any element, that the falsework was designed to support during construction.

Falsework removal: Releasing, lowering, and disposing of the falsework.

10-19-18

Delete the 7th paragraph of section 48-2.01C(2).

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Replace the 4th paragraph of section 48-2.02B(2) with:

10-19-18

The assumed horizontal load the falsework bracing system must resist must be the sum of the actual horizontal loads due to equipment, construction sequence or other causes, and a wind loading. The assumed horizontal load in any direction must be at least 2 percent of the total dead load.

Replace the table in the 2nd paragraph of section 48-2.02B(3)(b) with:

10-19-18

Quality characteristic	Requirement	
Compression perpendicular to the grain (psi)	450	
Compression parallel to the grain (psi)	480,000/(<i>L</i> / <i>d</i>) ² ; 1,600 maximum	
Flexural stress	1,800 psi; 1,500 psi maximum for members with a nominal depth of 8 inches or less.	
Horizontal shear (psi)	140	
Axial tension (psi)	1,200	
Deflection due to concrete loading only	1/240 of span length	
Modulus of elasticity (E) (psi)	1.6 x 10 ⁶	
Timber piles (tons)	45	

NOTES:

L = unsupported length, inches

d = least dimension of a square or rectangular column or the width of a square of equivalent cross-sectional area for round columns, inches

Replace the table in the 3rd paragraph of section 48-2.02B(3)(c) with:

10-19-18

Quality characteristic	Requirement	
Compression, flexural (psi)	12,000,000/[(L x d)/(b x t)] ^a	
Deflection due to concrete loading only	1/240 of the span	
Modulus of elasticity (E) (psi)	30 x 10 ⁶	

NOTES:

L = unsupported length, inches

d = least dimension of rectangular columns or the width of a square of equivalent cross-sectional area for round columns, or the depth of beams, inches

b = width of the compression flange, inches

t =thickness of the compression flange, inches

 F_y = specified minimum yield stress in psi

^aNot to exceed (1) 22,000 psi for unidentified steel, (2) 22,000 psi for steel complying with ASTM A36/A36M, or (3) $0.6F_{\nu}$ for other identified steel

Add to section 48-2.02:

10-19-18

48-2.02C Falsework Lighting 48-2.02C(1) General

Reserved

48-2.02C(2) Pavement Illumination

Pavement illumination fixture must:

- 1. Have commercial-type flood lamp holder with protective covers.
- 2. Be fully adjustable with brackets and locking screws.

Road Safety Improvements at Various Locations box.

Contract No. 5415, CIP No. 72195 May 11, 2021

4. Have a medium-base PAR-38 guartz-halogen flood lamp or an equivalent energy efficient alternative emitting 1.700 to 2.200 lumens with a correlated color temperature of 3.000 kelvin or less.

48-2.02C(3) Portal Illumination

Portal illumination includes plywood sheet clearance guides 4 feet wide by 8 feet high and fixtures with a PAR reflector floodlamp or equivalent energy efficient alternatives emitting 1,500 to 1,700 lumens with a correlated color temperature of 3,000 kelvin or less.

48-2.02C(4) Pedestrian Walkway Illumination

Pedestrian walkway illumination fixtures must be the flush mounted type equipped with a damageresistant, clear, polycarbonate diffuser lens, an overhead protection shield, and a standard incandescent lamp or equivalent energy efficient alternatives emitting 1,500 to 2,000 lumens with a correlated color temperature of 3,000 kelvin or less.

Add to section 48-2.03A:

10-19-18

Traffic must be detoured, from the lanes over which falsework is being erected, released, or removed.

Replace the 3rd paragraph of section 48-2.03B with:

10-19-18

Falsework piles must be driven and assessed under section 49. The actual nominal pile resistance must be at least twice the falsework pile design load. For pile acceptance, the required number of hammer blows in the last foot of driving is determined using the formula in 49-2.01A(4)(c).

Add between the 2nd and 3rd paragraphs of section 48-2.03C:

10-19-18

Falsework erection includes adjustments or removal of components that contribute to the horizontal stability of the falsework system.

Replace section 48-2.03D with:

10-19-18

48-2.03D Removal

Remove falsework such that portions of falsework not yet removed remain stable at all times.

Falsework release includes blowing sand from sand jacks, turning screws on screw jacks, and removing wedges.

Except for concrete above the deck, do not release falsework supporting any span of a:

- 1. Simple span bridge before 10 days after the last concrete has been placed
- 2. Continuous or rigid frame bridge before 10 days after the last concrete has been placed:
 - 2.1. In that span
 - 2.2. In adjacent portions of each adjoining span for a length equal to one-half of the span where falsework is to be released
- 3. Simple span, continuous, or rigid frame bridge until the supported concrete has attained a compressive strength of 2,880 psi or 80 percent of the specified strength, whichever is greater

Do not release falsework for prestressed portions of structures until prestressing steel has been tensioned.

Do not release falsework supporting any span of a continuous or rigid frame bridge until all required prestressing is complete (1) in that span and (2) in adjacent portions of each adjoining span for a length Road salety improvements around the span where falsework is to be released. County of El Dorado

Contract No. 5415, CIP No. 72195

Appendix A - RSS

AA-28

May 11, 2021

Release falsework supporting spans of CIP girders, slab bridges, or culverts before constructing or installing railings or barriers on the spans unless authorized.

Release falsework for arch bridges uniformly and gradually. Start at the crown and work toward the springing. Release falsework for adjacent arch spans concurrently.

Do not release falsework that supports overhangs, deck slabs between girders, or girder stems that slope 45 degrees or more from vertical before 7 days after deck concrete has been placed.

You may release falsework supporting the sides of girder stems that slope less than 45 degrees from vertical before placing deck concrete if you install lateral supports. Lateral supports must be:

- Designed to resist rotational forces on the girder stem, including forces due to concrete deck placement
- 2. Installed immediately after each form panel is removed
- 3. Installed before releasing supports for the adjacent form panel

Do not release falsework for bent caps supporting steel or PC concrete girders before 7 days after placing bent cap concrete.

Release falsework for structural members subject to bending as specified for simple span bridges.

Do not release falsework for box culverts and other structures with decks lower than the roadway pavement and span lengths of 14 feet or less until the last placed concrete has attained a compressive strength of 1,600 psi. Curing of the concrete must not be interrupted. Falsework release for other box culverts must comply with the specifications for the release of bridge falsework.

Do not release falsework for arch culverts sooner than 40 hours after concrete has been placed.

Remove falsework piling to at least 2 feet below the original ground or streambed. Remove falsework piling driven within ditch or channel excavation limits to at least 2 feet below the bottom and side slopes of the excavated areas.

Dispose of falsework materials and work debris.

Falsework removal systems employing methods of holding falsework by winches, hydraulic jacks with prestressing steel, HS rods, or cranes must also be supported by an independent support system when the falsework removal system is not actively lowering the falsework at vehicular, pedestrian, or railroad traffic openings.

Bridge deck openings used to facilitate falsework removal activities must be formed with a 6-inch maximum diameter opening. The opening must be located away from the wheel paths.

Clean and roughen openings made in the bridge deck. Fill the deck openings with rapid setting concrete complying with section 60-3.02B(2).

Bridge soffit openings used to facilitate falsework removal activities must be formed with a 5-inch maximum diameter.

Anchor 10-inch-square aluminum or galvanized steel wire, 1/4-inch-mesh hardware cloth with a 0.025-inch minimum wire diameter firmly to the inside of the soffit openings. Construct a 1/2-inch drip groove to the outside of soffit openings.

Falsework removal over roadways with a vertical traffic opening of less than 20 feet must start within 14 days after the falsework is eligible to be released and must be completed within 45 days after it is eligible to be released.

48-2.03E Falsework Lighting 48-2.03E(1) General

Provide lighting to illuminate the pavement, portals, and pedestrian walkways at or under openings in the falsework required for traffic.

Install lighting for pedestrian walkway illumination at all pedestrian openings through or under the falsework.

Design falsework lighting such that required maintenance can be performed with a minimum of inconvenience to traffic. Closing of traffic lanes for routine maintenance is not allowed on roadways with posted speed limits greater than 25 mph.

During the hours of darkness, illuminate:

- 1. Falsework portals
- 2. Pavement under falsework with portals less than 150 feet apart

Use photoelectric switches to control falsework lighting systems. Pavement under falsework with portals 150 feet or more apart and all pedestrian openings through falsework must be illuminated 24 hours per day.

Aim the lighting fixtures to avoid glare to motorists.

Fasten a Type NMC cable with no. 12 minimum conductors with ground wire to the supporting structure at sufficient intervals to adequately support the cable and within 12 inches from every box or fitting. Use 1/2-inch or larger Type 1 conduit for conductors within 8 feet of ground.

Provide a maximum 20 A fuse for each branch circuit for illumination systems at each bridge location.

Arrange with the service utility to complete service connections for falsework lighting. You pay for energy, line extension, service, and service hookup costs.

48-2.03E(2) Pavement Illumination

Install a continuous row of fixtures beneath falsework structure with the end fixtures not further than 10 feet inside portal faces. Energize the fixtures immediately after the members supporting them have been erected.

Place the fixtures along the sides of the opening not more than 4 feet behind or 2 feet in front of the roadway face of the temporary railing. Mount the fixtures from 12 to 16 feet above the roadway surface without obstructing the light pattern on the pavement.

48-2.03E(3) Portal Illumination

Provide falsework portal illumination on the side facing traffic. Mount fixtures on the structure directly over each vertical support adjacent to the traveled way, as needed, to uniformly illuminate the exterior falsework beam, the clearance guides, and the overhead clearance sign. Each fixture must be supported approximately 16 feet above the pavement and 6 feet in front of the portal face.

Portal illumination clearance guides must:

- 1. Be fastened vertically, facing traffic, with the bottom of the panel from 3 to 4 feet above the roadway
- 2. Have the center of the panel located approximately 3 feet horizontally behind the roadway face of the railing
- 3. Be freshly painted panels for each installation with not less than 2 applications of flat white paint.

Paint testing of painted panels not required.

Portal lighting and clearance guides must be installed on the day the vertical members are erected.

If ordered, repaint the designated areas to improve the general appearance of the painted surfaces.

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48-2.03E(4) Pedestrian Walkway Illumination

Provide pedestrian walkway illumination immediately after the overhead protection shield is erected.

Flush mount the fixtures in the overhead protection shield and center them over the passageway at intervals of not more than 15 feet with the end fixtures not more than 7 feet inside the end of the pedestrian openings.

10-19-18

Delete the 4th paragraph of section 48-3.01C(2).

Add between the 9th and 10th paragraphs of section 48-3.02B:

For bridge removal, the temporary support system must resist the design loads and forces shown. As a minimum, the horizontal load to be resisted in any direction for temporary support shoring and temporary bracing must be (1) the sum of actual horizontal loads due to equipment, construction sequence, or other causes plus an allowance for wind and (2) not less than 5 percent of the total dead load of the structure being removed.

10-19-18

Delete the 2nd and 3rd paragraphs of section 48-4.01A.

Replace section 48-4.01C with:

10-19-18

48-4.01C Submittals

Submit shop drawings for temporary decking. Include the following:

- 1. Description, location, and value of all loads if temporary decking is not shown
- 2. Details of the connection between the temporary decking and the existing or new structure if temporary decking is not shown
- 3. Storage location of equipment and materials that allows for 1 shift of work and placement of temporary decking within the time allowed
- 4. Construction sequence and schedule details
- 5. Cure time for concrete to be placed under a steel plate system
- 6. Details for removing temporary decking and restoring the existing structure

If temporary decking is not shown, shop drawings must be signed by an engineer who is registered as a civil engineer in the State.

Replace section 48-4.01D with:

10-19-18

48-4.01D Quality Assurance

If temporary decking is not shown, the temporary decking design must comply with:

- 1. The unfactored permit loads, braking force, and HL93 loads except lane load from AASHTO LRFD Bridge Specifications with California Amendments.
- 2. Section 48-2.02B(3)
- 3. Live load deflection must not exceed 1/300 of the temporary decking span for the design load.
- 4. Temporary decking must have a uniform surface with a coefficient of friction of at least 0.35 when measured under California Test 342.
- 5. Steel plate systems must be mechanically connected to the existing structure and adjacent approaches. If a steel plate spans a joint, the mechanical connection must accommodate at least 50 Road Safety Improvements at Various Locations

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6. Must not overstress, induce permanent forces into, or produce cracking in the existing structure.

Replace section 48-4.03 with:

10-19-18

48-4.03 CONSTRUCTION

Temporary decking must consist of one of the following:

- 1. Steel plate system that spans the incomplete work.
- 2. Falsework with an asphalt concrete surface that spans the incomplete work. Do not use falsework with an asphalt concrete surface to cover deck concrete that has not cured or to cover partially installed joint materials.

Construct temporary decking under the specifications for falsework in section 48-2 except the first paragraph of section 48-2.03D does not apply.

If there is an elevation difference of more than 1/2 inch between the temporary decking and the adjacent deck, install temporary tapers up to and away from the temporary decking. Construct tapers under section 7-1.03. If the temporary decking does not extend the entire width of the roadway, taper the sides of the temporary decking at a 12:1 (horizontal: vertical) ratio.

Material for temporary tapers must comply with section 60-3.02B(2) or 60-3.04B(2). Cure temporary tapers at least 3 hours before allowing traffic on the temporary decking.

If unanticipated displacements, cracking, or other damage occurs to the existing structure or to any new components installed in or adjacent to the deck, stop work on the deck and perform corrective measures.

Edges of steel plate systems must be in full contact with the existing deck and the adjacent approach slab. If used, shims must be securely attached to the plate.

For falsework with an asphalt concrete cover, asphalt concrete must be at least 3 inches thick and compacted in place.

Do not allow traffic on deck concrete until it has attained the design compressive strength shown.

When temporary decking is no longer needed, remove temporary decking materials and connections from the existing structure as soon as possible. Remove modifications to the existing structure except where permanent alterations are shown.

10-19-18

Delete the 4th paragraph of section 48-5.01C.

Replace the 1st paragraph of section 48-5.02B with:

10-19-18

The jacking support system must resist the structure dead load and lateral design forces shown, plus any additional loads from jacking equipment and activities. As a minimum, the horizontal load to be resisted in any direction for the jacking support system and temporary bracing must be (1) the sum of actual horizontal loads due to equipment, construction sequence, or other causes plus an allowance for wind as specified in Section 48-2.02B(2) and (2) not less than 2 percent of the total dead load of the structure being jacked. You must determine soil bearing values for support footings. If the jacking support stiffness exceeds the described minimum stiffness, increase the lateral design forces to be compatible with the jacking support lateral stiffness.

Replace the 1st paragraph of section 48-5.03 with:

10-19-18

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49 PILING

04-19-19

Replace the 6th paragraph of section 49-1.01D(4) with:

10-19-18

Except for load test piles and anchor piles, drive the 1st production pile in the control zone. Do not install any additional production piles until dynamic monitoring has been performed, and the Engineer provides you with the bearing acceptance criteria curves for any piles represented by the dynamically monitored piles.

Replace the 3rd paragraph of section 49-2.01D with:

10-19-18

The payment quantity for furnish piling is the length measured along the longest side of the pile from the specified tip elevation shown to the plane of pile cutoff, except for dynamically monitored piles. For dynamically monitored piles, the payment quantity for furnish piling includes an additional length of 2 times the largest cross-sectional dimension of the pile plus 2 feet.

Add to the end of section 49-2.02A(2):

10-19-18

longitudinal weld length: The length of a continuous longitudinal weld.

circumferential weld length: The length of a continuous weld around the circumference of the pipe pile.

spiral weld length: The length of one full 360-degree spiral weld revolution around the circumference of the pipe pile.

Replace the 3rd paragraph of section 49-2.02A(4)(b)(iii)(B) with:

10-19-18

For welding performed under AWS D1.1:

- 1. Perform NDT on 25 percent of each longitudinal, circumferential, or spiral weld length using RT or
- 2. If repairs are required in a portion of the tested weld:
 - 2.1. Perform additional NDT on untested areas on each end of the initial portion tested. The length of additional NDT on each end must equal 10 percent of the weld length. If it is not possible to perform 10 percent of the weld length on one end, perform the remaining percentage on the other end.
 - 2.2. After this additional 20 percent of NDT is performed, determine and record the total cumulative repair lengths from all NDT for each weld length. If the cumulative weld repair length is equal to or more than 10 percent of the weld length, then perform NDT on the entire weld length.
 - 2.3. Perform NDT on the repaired portion plus 2 inches on each end of the repaired weld excavation.

Replace the 2nd paragraph of section 49-2.02A(4)(b)(iii)(C) with:

10-19-18

Perform NDT on 25 percent of the weld length performed by each welder, using RT or UT at locations selected by the Engineer. The Engineer may select several locations on a given splice. The cover pass must be ground smooth at locations to be tested.

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Replace the 4th paragraph of section 49-2.02A(4)(b)(iii)(C) with:

10-19-18

If repairs are required in a portion of the tested weld:

- Perform additional NDT on untested areas on each end of the initial portion tested. The length of additional NDT on each end must equal 10 percent of the pipe's outside circumference. If it is not possible to perform 10 percent of the weld length on one end, perform the remaining percentage on the other end.
- 2. After this additional 20 percent of NDT is performed, determine and record the total cumulative repair lengths from all NDT for each weld length. If the cumulative weld repair length is equal to or more than 10 percent of the pipe's outside circumference, then perform NDT on the entire weld length.
- 3. Perform NDT on the repaired portion plus 2 inches on each end of the repaired weld excavation.

Replace the 5th paragraph of section 49-2.02B(1)(b) with:

04-19-19

If splicing steel pipe piles using a circumferential weld, the piles must comply with the fit-up requirements of clause 9.24.1 of AWS D1.1.

Replace section 49-3.01B(2) with:

04-19-19

49-3.01B(2) Mass Concrete

Section 49-3.01B(2) applies to CIP concrete piles with a diameter greater than 8 feet.

For piles with a diameter greater than 8 feet and less than or equal to 14 feet:

- 1. The specifications for SCM content in the 4th paragraph of section 90-1.02B(3) do not apply.
- 2. The SCM content of the concrete must comply with the following:
 - 2.1. Any combination of portland cement and fly ash satisfying:

Equation 1:

 $(12 \times FM)/MC \geq X$

where:

FM = fly ash complying with AASHTO M 295, Class F, with a CaO content of up to 10 percent, including the quantity in blended cement, lb/cu yd

MC = minimum quantity of cementitious material specified, lb/cu yd

X = 3.0 for $8 < D \le 10$, where D = pile diameter in feet

X = 4.0 for $10 < D \le 14$, where D = pile diameter in feet

Equation 2:

 $MC - MSCM - PC \ge 0$

where:

MC = minimum quantity of cementitious material specified, lb/cu yd
 MSCM = minimum sum of SCMs that satisfies equation 1, lb/cu yd
 PC = quantity of portland cement, including the quantity in blended cement, lb/cu yd

2.2. You may replace any portion of the portland cement with any SCM complying with section 90-1.02B(3) if equations 1 and 2 are satisfied as specified above.

For piles with a diameter greater than 14 feet, the concrete must comply with the specifications for mass Road safety improvious Various Locations

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Add to the end of section 49-3.02C(1):

04-19-19

You may construct CIDH concrete piles 24 inches in diameter or larger by excavating and depositing concrete under slurry.

04-19-19

Delete the 2nd paragraph of section 49-3.02C(8).

Replace section 49-4.01 with:

04-19-19

49-4.01 GENERAL

49-4.01A Summary

Section 49-4 includes specifications for drilling holes and installing steel soldier piles in the holes.

Steel soldier piles must comply with section 49-2.03.

49-4.01B Definitions

Reserved

49-4.01C Submittals

Reserved

49-4.01D Quality Assurance

Reserved

^^^^^

51 CONCRETE STRUCTURES

04-19-19

Add to the beginning of section 51-1.01C(1):

04-19-19

If ordered, submit concrete form design and materials data for each forming system.

Add to section 51-1.03:

10-19-18

51-1.03J Temporary Decking

If you are unable to complete bridge reconstruction activities before the bridge is to be opened to traffic, furnish and maintain temporary decking under section 48-4 until that portion of the work is complete.

Replace the 2nd paragraph of section 51-4.01C(1) with:

04-19-19

For PC PS concrete girders and deck panels, submit an erection work plan. The work plan must be signed by an engineer who is registered as a civil engineer in the State and include procedures, details, and sequences for:

- 1. Unloading
- 2. Lifting

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Replace the 1st paragraph of section 51-4.01C(2)(a) with:

04-19-19

Submit shop drawings for PC concrete members to the OSD Documents Unit unless otherwise specified.

Replace Reserved in section 51-4.01C(2)(e) with:

04-19-19

For PC deck panels, shop drawings must include:

- 1. Panel materials, shapes, and dimensions.
- 2. Deck panel layout identifying the locations of each panel.
- 3. Reinforcing, joint, and connection details.
- 4. Complete details of the methods, materials, and equipment used in prestressing and precasting work.
- 5. Type of texture and method of forming the textured finish.
- 6. Methods and details for lifting, bracing, and erection.
- 7. Method of support and grade adjustment.
- 8. Methods of sealing against concrete leaks.

Replace the 2nd paragraph of section 51-4.02B with:

04-19-19

Handle, store, transport, and erect PC members in a position such that the points of support and directions of the reactions with respect to the member are approximately the same as when the member is in its final position.

Replace Reserved in section 51-4.02D(7) with:

04-19-19

Clearly label the top surface of each panel with the word *TOP* as shown on the deck panel layout using waterproof paint or other authorized means.

Apply a coarse texture to at least 90 percent of the deck panel top surface area by brooming with a stiff bristled broom or by other suitable devices that results in uniform scoring parallel with the prestressing strands. The top surface texture must have a maximum 1/8-inch texture.

Each camber strip must:

- 1. Consist of high density expanded polystyrene with a minimum compressive strength of 55 psi.
- 2. Consist of a single layer and extend continuously under each deck panel.
- 3. Achieve a height that accounts for roadway profile, cross slope, and girder camber.
- 4. Have 1/4-inch v-notches or 1/2 by 1/2-inch slots cut into the top surface on 4-foot centers.

Camber strip dimensions must comply with the following table:

Polystyrene Camber Strip Dimensions

- Clystyrone Gamber Carp Ennoncione		
Height (H)	Width (W)	
(inches)	(inches)	
1 to 2.5	1.5	
Greater than 2.5 and less than or equal to 3.5	1.75	
Greater than 3.5 and less than or equal to 4	2	

Chemical adhesive must be suitable for use with concrete and polystyrene.

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For the concrete deck pour, the aggregate must comply with the 1/2-inch maximum or the 3/8-inch maximum combined aggregate gradation specified in section 90-1.02C(4)(d).

Add between the 5th and 6th paragraphs of section 51-4.03B:

10-19-18

Erect steel or PC girders onto the supporting concrete, such as bent caps or abutments, after the concrete attains a compressive strength of 2,880 psi or 80 percent of the specified strength, whichever is greater.

Replace Reserved in section 51-4.03G with:

04-19-19

Construct the deck panel system in the following sequence:

- 1. After girders and diaphragms are in place, place each polystyrene camber strip along the top of each girder. Apply a continuous bead of chemical adhesive to the top and bottom of each camber strip to prevent gaps between the camber strip and concrete members.
- 2. Place each deck panel as shown on the deck panel layout such that each panel bears uniformly on the camber strips.
- 3. Abrasive blast clean deck panel and girder surfaces before placing deck reinforcement. Remove all surface laitance, curing compound, and other foreign materials. Thoroughly clean under the edges of each panel to ensure removal of construction debris before the stage 1 deck pour.
- 4. Place deck reinforcement.
- 5. Place deck concrete in a two-stage continuous pour:
 - 5.1. Place and vibrate stage 1 concrete over the girders by completely filling the area between the camber strips in from 15 to 30 feet longitudinal sections ahead of the stage 2 concrete deck pour. Check slots or holes in camber strips to ensure removal of air voids and full consolidation during concrete placement.
 - 5.2. Place stage 2 concrete deck over stage 1 concrete and deck panels as to not result in a cold joint between the two stages.

If required, install temporary bracing between the ends of each deck panel to prevent transverse panel movement that could lead to loss of bearing on the camber strips.

Loads placed on deck panels during construction must not exceed 50 psf.

Replace the row for Apparent elongation in the table in the 2nd paragraph of section 51-5.02B with:

Apparent elongation (max, percent) ASTM D4632 35

^^^^^^

53 SHOTCRETE

10-19-18

Replace the 1st sentence of section 53-2.01A with:

10-19-18

Section 53-2 includes specifications for placing structural shotcrete using the wet-mix process.

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Add between the 1st and 2nd paragraphs of section 53-2.01D(4)(b):

10-19-18

For soil nail walls, do not core through waler bars.

Add to the beginning of section 53-2.02:

10-19-18

Shotcrete must comply with the specifications for concrete in section 90-1.

^^^^^^

55 STEEL STRUCTURES

04-19-19

Replace the 3rd paragraph of section 55-1.02E(7)(a) with:

04-19-19

Dimensional details and workmanship for welded joints in tubular and pipe connections must comply with clause 9 of AWS D1.1.

^^^^^

56 OVERHEAD SIGN STRUCTURES, STANDARDS, AND POLES

04-19-19

Replace section 56-1.01D(2)(b)(i) with:

04-19-19

56-1.01D(2)(b)(i) General

Perform NDT of steel members under AWS D1.1 and the requirements shown in the following tables:

Nondestructive Testing for Steel Standards and Poles

Weld location	Weld type	Minimum required NDT
Circumferential splices around the perimeter of tubular sections, poles, and arms	CJP groove weld with backing ring	100% UT or RT
Longitudinal seam	CJP or PJP groove weld	Random 25% MT
Longitudinal seam within 6 inches of a circumferential weld	CJP groove weld	100% UT or RT
Welds attaching base plates, flange plates, pole	CJP groove weld with backing ring and reinforcing fillet	t≥ 1/4 inch: 100% UT and 100% MT t< 1/4 inch: 100% MT after final weld pass
plates, or mast arm plates to poles or arm tubes	External (top) fillet weld for socket-type connections	100% MT
Hand holes and other appurtenances	Fillet and PJP welds	MT full length on random 25% of all standards and poles
Longitudinal seam on the telescopic female end, designated slip-fit length plus 6 inches	CJP groove weld	100% UT or RT

NOTE: t = pole or arm thickness

Nondestructive Testing for Overhead Sign Structures

Weld location	Weld type	Minimum required NDT
Base plate to post	CJP groove weld with backing ring and reinforcing fillet	100% UT and 100% MT
Base plate to gusset plate	CJP groove weld	100% UT
Circumferential splices of pipe or tubular sections	CJP groove weld with backing ring	100% UT or RT
Split post filler plate welds	CJP groove weld with backing bar	100% UT or RT
Longitudinal seam weld for pipe posts	CJP groove weld	t < 1/4 inch: 25% MT t ≥ 1/4 inch: 25% UT or RT
	PJP groove weld	Random 25% MT
Chord angle splice weld	CJP groove weld with backing bar	100% UT or RT
Truss vertical, diagonal, and wind angles to chord angles	Fillet weld	Random 25% MT
Upper junction plate to chord (cantilever type truss)	Fillet weld	Random 25% MT
Bolted field splice plates (tubular frame type)	CJP groove weld	100% UT and 100% MT
Cross beam connection plates (lightweight extinguishable message sign)	Fillet weld	Random 25% MT
Arm connection angles (lightweight extinguishable message sign)	Fillet weld	100% MT
Mast arm to arm plate (lightweight extinguishable message sign)	CJP groove weld with backing ring	t ≥ 1/4 inch: 100% UT and 100% MT t < 1/4 inch: 100% MT after final weld pass
Post angle to post (lightweight extinguishable message sign)	Fillet weld	100% MT
Hand holes and other appurtenances	Fillet and PJP welds	MT full length on random 25% of all sign structures

NOTE: t = pole or arm thickness

Replace section 56-1.01D(2)(b)(ii) with:

04-19-19

56-1.01D(2)(b)(ii) Ultrasonic Testing

For UT of welded joints with any members less than 5/16-inch thick or tubular sections less than 24 inches in diameter, the acceptance and repair criteria must comply with Clause 9.27.1.1 of AWS D1.1.

When performing UT, use an authorized procedure under AWS D1.1, Annex S.

For UT of other welded joints, the acceptance and repair criteria must comply with Table 6.3 of AWS D1.1 for cyclically loaded nontubular connections.

After galvanization, perform additional inspection for toe cracks along the full length of all CJP groove welds at tube-to-transverse base plate connections using UT.

^^^^^

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57 WOOD AND PLASTIC LUMBER STRUCTURES

04-19-19 **Add to section 57-2.02B**:

04-19-19

HDPE shims must be commercial quality.

Replace section 57-2.02C with:

04-19-19

Install lagging members 4 inches thick or less with a 3/8-inch gap between members. Install lagging members greater than 4 inches thick with a 1/2-inch gap between members.

Replace the table in the 4th paragraph of section 57-3.02C with:

10-19-18

Quality characteristic	Test method	Requirement
Density of concrete core	ASTM D792	1,762
(kg/m³, min)		
28-day compressive strength of	ASTM C579	5,000
concrete core (psi, min)		
Structural strength of shell:		
Tensile strength, tensile	ASTM D638	Less than 10 after UV
modulus (percent loss)		deterioration test specified
Flexural strength, flexural	ASTM D790	for plastic lumber
modulus (percent loss)		
Dry film thickness of coating		15
(mils, min)		
Color change of coating	ASTM D4587,	No visible color change
	Test Cycle 2	when tested for 800 hours
Initial adhesion of coating (psi, min)	ASTM D4541,	150
	Test Method D,	
	E, or F and	
	Protocol 2	
Decrease in initial adhesion of	ASTM D4541,	No more than 10 following
coating, decrease (percent)	Test Method D,	2 exposure cycles
	E, or F and	
	Protocol 2	
	ASTM D1183,	
	Test Condition Da	

^aUse a low temperature phase at 4 ± 5 °F and high temperature phase at 140 ± 5 °F.

^^^^^^

59 STRUCTURAL STEEL COATINGS

10-19-18

Replace the 2nd paragraph in section 59-1.01D with:

10-19-18

Measure coating adhesion strength with a self-aligning adhesion tester under ASTM D4541, Test Method D, E, or F and Protocol 2.

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Replace the 2nd paragraph of section 59-1.02C with:

10-19-18

Coatings selected for use must comply with the volatile organic compound concentration limits specified for the air quality district where the coating is applied. The undercoats and finish or final coats selected for use must be compatible with each other.

Add after the paragraph of section 59-2.01A(3)(a):

10-19-18

If requested by the Engineer, submit documentation from the coating manufacturer verifying the compatibility of the undercoats and finish or final coats selected for use.

^^^^^

60 EXISTING STRUCTURES

04-19-19

Replace section 60-2.02B with:

04-19-19

60-2.02B Materials

Design criteria for temporary support shoring and temporary bracing must comply with section 48-3.02B.

Add to section 60-3.01A:

10-19-18

If you are unable to complete bridge reconstruction activities before the bridge is to be opened to traffic, furnish and maintain temporary decking under section 48-4 until that portion of the work is complete.

Replace the 3rd and 4th paragraphs of section 60-3.02C(3) with:

04-19-19

Remove asphalt concrete surfacing by cold milling under the following conditions:

- 1. If a membrane seal is shown:
 - 1.1. Remove the seal by cold milling
 - 1.2. Do not remove more than 1/2 inch of the existing concrete slab
- 2. If a membrane seal is not shown:
 - 2.1. Remove asphalt concrete surfacing until a 1/2-inch minimum of surfacing remains on top of existing concrete slab
 - 2.2. Use other authorized means to remove the remaining asphalt concrete without damage to the concrete slab

Add to section 60-3.02C(3):

04-19-19

Where a portion of the asphalt concrete surfacing is to remain, saw cut a 2-inch-deep true line along the edge to remain in place before removing asphalt concrete. Remove the asphalt concrete without damaging the surfacing to remain in place.

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Delete the 3rd paragraph of section 60-3.04B(3)(a).

Replace the 9th paragraph of section 60-3.04B(3)(c) with:

04-19-19

Protect the overlay from moisture and do not allow traffic or equipment on the overlay (1) for a minimum of 4 hours cure time after final finishing and (2) until each rebound test result for the final finish shows a reading of at least 28 when tested under ASTM C805. The cure time must be extended if ordered. The rebound test may not be used to reduce the 4-hour cure time of the overlay.

Replace the 10th paragraph of section 60-4.09B(2)(a) with:

10-19-18

Steel parts must comply with ASTM A36/A36M or A576, Grade 1030 and must not be rimmed or capped steel.

^^^^^^

DIVISION VII DRAINAGE FACILITIES 66 CORRUGATED METAL PIPE

10-19-18

Replace the 1st paragraph in section 66-1.02D with:

10-19-18

Coupling bands for corrugated metal pipe must comply with either section 66-1.02D or section 61-2.01D(2)(b).

Replace the 6th paragraph in section 66-1.02D with:

10-19-18

Joints for siphons and joints for pipes shown as watertight must be watertight under pressure and all conditions of expansion, contraction, and settlement, and must comply with section 61-2.01D(2)(a) for watertightness.

Replace the 4th paragraph of section 66-2.03 with:

10-19-18

Place cement treated structure backfill for slotted corrugated steel pipe as shown and under section 19-3.02F(3) for soil cement beddings. Cover the completed cement treated structure backfill with a curing seal of asphaltic emulsion, Grade SS1 or CSS1.

^^^^^^

DIVISION VIII MISCELLANEOUS CONSTRUCTION 78 INCIDENTAL CONSTRUCTION

04-19-19 **Replace section 78-4.03 with:**

04-19-19

78-4.03 PAINTING CONCRETE

78-4.03A General

78-4.03A(1) Summary

Section 78-4.03 includes specifications for preparing and painting concrete surfaces.

78-4.03A(2) Definitions

Reserved

78-4.03A(3) Submittals

Submit the coating manufacturer's application instructions at least 7 days before use.

78-4.03A(4) Quality Assurance

Reserved

78-4.03B Materials

Coatings for concrete must comply with the specifications for acrylic emulsion paint for exterior masonry in section 91-4.02B.

Coatings must be white.

78-4.03C Construction

78-4.03C(1) General

Reserved

78-4.03C(2) Surface Preparation

Before painting, surfaces must be:

- At least 28 days old.
- Prepared under SSPC-SP 13/NACE no. 6. Pressure rinse the prepared surfaces before applying the paint.
- 3. Thoroughly dry. You may use artificial drying methods if authorized.

78-4.03C(3) Application

Apply at least 2 coats under the manufacturer's instructions and SSPC-PA 7. Protect adjacent surfaces during painting using an authorized method.

78-4.03D Payment

Not Used

Replace section 78-4.04 with:

04-19-19

78-4.04 STAINING CONCRETE AND SHOTCRETE

78-4.04A General

78-4.04A(1) Summary

Section 78-4.04 includes specifications for preparing and staining concrete and shotcrete surfaces.

78-4.04A(2) Definitions

acid stain: non-tintable, transparent stain that contains dilute acid.

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water-based stain: semi-transparent or solid water-based coating in an acrylic emulsion vehicle, that can be tinted to match an AMS-STD-595 color.

78-4.04A(3) Submittals

78-4.04A(3)(a) General

Submit the stain and sealer manufacturer's product data and application instructions at least 7 days before starting staining activities.

78-4.04A(3)(b) Contractor Qualifications

Submit the following documentation at least 10 days before the prestaining meeting:

- 1. Summary of the staining contractor's experience that demonstrates compliance with section 78-4.04A(4)(c).
- 2. List of at least 3 projects completed in the last 5 years that demonstrate the staining contractor's ability to stain surfaces similar to the surfaces for this project. For each project include:
 - 2.1. Project description
 - 2.2. Name and phone number of the owner
 - 2.3. Staining completion date
 - 2.4. Color photos of the completed stained surface

78-4.04A(3)(c) Staining Quality Work Plan

Submit a staining quality work plan at least 10 days before the prestaining meeting. The work plan must include details for preparing and staining the surfaces to achieve the required color, and for sealing the surfaces, including:

- 1. Number of applications that will be used to apply the stain
- 2. For each application of the stain, a description of:
 - 2.1. Manufacturer, color, finish, and percentage strength mixture of the stain that will be applied
 - 2.2. Proposed methods and tools for applying the stain
- 3. Proposed methods for protecting adjacent surfaces during staining
- 4. Proposed methods and tools for applying the sealer

For acid stains, the work plan must also include a rinse water collection plan for containing all liquid, effluent, and residue resulting from preparing and staining the surfaces.

78-4.04A(4) Quality Assurance

78-4.04A(4)(a) General

Reserved

78-4.04A(4)(b) Test Panels

Stain the authorized test panel complying with section 51-1.01D(2)(c) or section 53-3.01D(3).

The test panel must be:

- 1. Stained using the same personnel, materials, equipment, and methods to be used in the work
- 2. Accessible for viewing
- 3. Displayed in an upright position near the work
- 4. Authorized for staining before starting the staining work

If ordered, construct additional test panels until a satisfactory color is attained. The preparing and staining of additional test panels is change order work.

The Engineer uses the authorized stained test panel to determine the acceptability of the stained surface.

Dispose of the test panels after the staining work is complete and authorized. Notify the Engineer before disposing of the test panels.

78-4.04A(4)(c) Contractor Qualifications

The staining contractor must have experience staining surfaces to simulate the appearance of natural rock formations or stone masonry, and must have completed at least 3 projects in the past 5 years involving staining of surfaces similar to the surfaces for this project.

78-4.04A(4)(d) Prestaining Meeting

Before starting staining activities, conduct a meeting to discuss the staining quality work plan. Meeting attendees must include the Engineer and all staining contractors.

78-4.04B Materials

78-4.04B(1) General

Reserved

78-4.04B(2) Stain

78-4.04B(2)(a) General

The stain must be:

- 1. Commercially available product designed specifically for exterior applications
- 2. Specifically manufactured for staining concrete surfaces

78-4.04B(2)(b) Acid Stain

Acid stain must:

- 1. Contain dilute acid that penetrates and etches the surfaces
- 2. Be a water-based solution of inorganic metallic salts
- 3. Produce abrasion-resistant color deposits

78-4.04B(2)(c) Water-based Stain

Water-based stain must be:

- 1. Acrylic emulsion
- 2. Non-fading and UV resistant
- 3. Capable of producing irregular, mottled tones

78-4.04B(3) Sealer

The sealer must be as recommended by the stain manufacturer, clear and colorless, and have a matte finish when dry.

78-4.04B(4) Joint Sealing Compound

Reserved

78-4.04C Construction

78-4.04C(1) General

At locations where there is exposed metal adjacent to the surfaces to be stained, seal the joint between the surfaces to be stained and the exposed metal with a joint sealing compound before applying the stain.

78-4.04C(2) Surface Preparation

Test surfaces for acceptance of the stain before applying the stain. Clean surfaces that resist accepting the stain and retest until passing.

Before staining, the surfaces must be:

- 1. At least 28 days old
- 2. Prepared under SSPC-SP 13/NACE no. 6
- 3. Thoroughly dry

78-4.04C(3) Application

78-4.04C(3)(a) General

Apply the stain under the manufacturer's instructions. Protect adjacent surfaces during staining. Drips, puddles, or other irregularities must be worked into the surface.

Apply the sealer under the manufacturer's instructions.

78-4.04C(3)(b) Acid Stain

Work the acid stain into the concrete using a nylon bristle brush in a circular motion.

After the last coat of stain has dried, rinse the stained surfaces with water and wet scrub them with a stiff-bristle nylon brush until the rinse water runs clear. Collect all rinse water.

78-4.04D Payment

Not Used

80 FENCES

10-19-18

Replace the 2nd paragraph of section 80-3.02B with:

10-19-18

Posts and braces must comply with the strength requirements in ASTM F1043 for one of the following:

- 1. Group IA, regular grade, for round pipes
- 2. Group IC, 50,000 psi yield, for round pipes
- 3. Group II-L for roll-formed posts and braces

Replace the list in section 80-4.02B(1)(b) with:

10-19-18

- 1. Comply with ASTM A1064 and have a Class 1 zinc coating complying with ASTM A641
- 2. Be welded or woven galvanized steel wire fabric
- 3. Be made of at least 16-gauge wire
- 4. Be 36 inches wide

Replace the paragraph in section 80-4.02B(2) with:

10-19-18

The materials for a temporary desert tortoise fence must comply with section 80-4.02B(1).

Replace the 2nd sentence in the 1st paragraph of section 80-4.02C(2) with:

10-19-18

Embed the posts at maximum 10-foot intervals into the ground.

^^^^^^^

DIVISION IX TRAFFIC CONTROL DEVICES 82 SIGNS AND MARKERS

04-19-19

Replace the list in the 1st paragraph of section 82-2.01C with:

04-19-19

- 1. Aluminum sheeting
- 2. Retroreflective sheeting
- 3. Color imaging methods and film
- 4. Protective-overlay film

Replace section 82-2.02D with:

04-19-19

82-2.02D Color Imaging Methods and Film

The material used for color imaging methods, film, and protective-overlay must be recommended by the retroreflective sheeting manufacturer.

Colored retroreflective sheeting must be used for the background.

Signs with green, red, blue, or brown backgrounds may use reverse-screened-process color on white retroreflective sheeting for the background color. The coefficient of retroreflection must be at least 70 percent of the coefficient of retroreflection specified in ASTM D4956 for the corresponding color of retroreflective sheeting.

The sign must have outdoor weatherability characteristics equivalent to those specified for the corresponding color of retroreflective sheeting in ASTM D4956.

Replace section 82-5.01A with:

10-19-18

Section 82-5 includes specifications for fabricating and installing markers, including milepost markers.

Replace the 2nd paragraph in section 82-5.02E with:

10-19-18

A target plate for milepost marker or Type L-1 (CA) or Type L-2 (CA) object marker installed on a metal post must be manufactured from an aluminum sheet or zinc-coated steel sheet.

Replace section 82-5.02H with:

10-19-18

82-5.02H Milepost Markers

Letters and numerals on a milepost marker must be made with opaque black paint or film. The paint and film must have an equivalent outdoor weatherability as the retroreflective sheeting specified in ASTM D4956. Nonreflective, opaque, black film must be vinyl or acrylic material.

Film for letters and numerals must be computer cut and have pressure-sensitive adhesive.

Replace the 5th paragraph of section 82-5.03 with:

10-19-18

Use stencils to paint letters and numerals on milepost markers.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

^^^^^

83 RAILINGS AND BARRIERS

04-19-19 **Replace section 83-2.01A(3) with:**

04-19-19

For midwest guardrail systems and thrie beam barrier, install steel foundation tubes and soil plates in soil.

Replace the 4th paragraph of section 83-2.03C with:

04-19-19

If median barrier delineation is shown, match the barrier marker spacing to the raised pavement marker spacing on the adjacent median edge line pavement delineation.

Replace the paragraph of section 83-3.03A(11) with:

04-19-19

Where concrete barrier markers are shown, cement the markers to the barrier under the manufacturer's instructions. Match the barrier marker spacing to the raised pavement marker spacing on the adjacent median edge line pavement delineation.

^^^^^^

84 MARKINGS

04-19-19 Replace section 84-2 with:

10-19-18

84-2 TRAFFIC STRIPES AND PAVEMENT MARKINGS

84-2.01 GENERAL

84-2.01A Summary

Section 84-2 includes specifications for applying traffic stripes and pavement markings.

Traffic stripes and pavement markings must comply with ASTM D6628 for daytime and nighttime color.

Retroreflectivity must be measured under ASTM E1710 and the sampling protocol specified in ASTM D7585.

84-2.01B Definitions

pavement marking: Transverse marking such as (1) a limit line, (2) a stop line, or (3) a word, symbol, shoulder, parking stall, or railroad-grade-crossing marking.

traffic stripe: Longitudinal centerline or lane line used for separating traffic lanes in the same direction of travel or in the opposing direction of travel or a longitudinal edge line marking the edge of the traveled way or the edge of a lane at a gore area separating traffic at an exit or entrance ramp. A traffic stripe is shown as a traffic line.

84-2.01C Submittals

For each lot or batch of traffic stripe material, primer, and glass beads, submit:

- 1. Certificate of compliance, including the material name, lot or batch number, and manufacture date
- 2. METS notification letter stating that the material is authorized for use, except for thermoplastic and primer
- 3. SDS

Road Savety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

For each lot or batch of thermoplastic, submit a manufacturer's certificate of compliance and the following test results from the California Test 423:

- 1. Brookfield Thermosel viscosity
- 2. Hardness
- 3. Yellowness index, white only
- 4. Daytime luminance factor
- 5. Yellow color, yellow only
- 6. Glass bead content
- 7. Binder content

The date of the test must be within 1 year of use.

Submit test results for each lot of beads specifying the EPA test methods used and tracing the lot to the specific test sample. The testing for lead and arsenic content must be performed by an independent testing laboratory.

Submit the thermoplastic test stripe to the Engineer.

Submit the retroreflectivity test result within 5 days of testing the traffic stripes and pavement markings. The data must include the retroreflectivity, time, date, and GPS coordinates for each measurement.

84-2.01D Quality Assurance

84-2.01D(1) General

Reserved

84-2.01D(2) Quality Control

Before starting permanent application of methyl methacrylate and two component paint traffic stripes and pavement markings, apply a test stripe on roofing felt or other suitable material in the presence of the Engineer. The test stripe section must be at least 50 feet in length.

Upon request, apply a thermoplastic test stripe on suitable material in the presence of the Engineer during the application of thermoplastic traffic stripes or markings. The test stripe must be at least 1 foot in length.

Remove loose glass beads before measuring the retroreflectivity. Obtain authorization to proceed with the application of traffic stripes and pavement markings.

Within 30 days of application, test the traffic stripes and pavement markings under the test methods and frequencies shown in the following table:

Traffic Stripe Testing Frequency

Quality characteristic	Test method	Minimum sampling and testing frequency
Initial retroreflectivity (min, mcd·m ⁻² ·lx ⁻¹)	ASTM E1710	ASTM D7585a
White		
Yellow		

^aUse the referee evaluation protocol for project length less than 10 miles. For project lengths greater than or equal to 10 miles, add one evaluation for every additional mile.

Verify the glass bead application rate by stabbing the glass bead tank with a calibrated rod.

84-2.01D(3) Department Acceptance

The Engineer will perform a nighttime, drive-through, visual inspection of the retroreflectivity of the traffic stripes and pavement markings and notify you of any locations with deficient retroreflectivity. Test the retroreflectivity of the deficient areas to confirm striping and pavement markings meets the requirements.

The thermoplastic test stripe will be tested for yellow color, daytime luminance factor, and yellowness index requirements by METS.

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84-2.02 MATERIALS

84-2.02A General

Reserved

84-2.02B Glass Beads

Each lot of glass beads must comply with EPA Test Method 3052 and 6010B or 6010C. Glass beads must contain less than 200 ppm each of arsenic and lead.

Type 1 glass beads must comply with AASHTO M 247.

Type 2 glass beads must comply with AASHTO M 247. At least 75 percent of the beads by count must be true spheres that are colorless and do not exhibit dark spots, air inclusions, or surface scratches when viewed under 20X magnification.

High-performance glass beads must be on the Authorized Material List for high-performance glass beads.

Large-gradation glass beads must be on the Authorized Material List for two component traffic paint.

Glass beads for methyl methacrylate must be on the Authorized Material List for methyl methacrylate traffic striping and pavement marking.

Glass beads for paint must comply with State Specification 8010-004.

Glass beads must be surface treated, according to the bead and the material manufacturer's instructions, to promote adhesion with the specified material.

84-2.02C Thermoplastic

Thermoplastic must comply with State Specification PTH-02HYDRO, or PTH-02ALKYD.

Sprayable thermoplastic must comply with State Specification PTH-02SPRAY.

Each lot or batch of thermoplastic must be tested under California Test 423.

84-2.02D Methyl Methacrylate

Methyl methacrylate traffic paint must:

- 1. Be on the Authorized Material List for methyl methacrylate traffic striping and pavement marking
- 2. Be Category 2

84-2.02E Traffic Striping and Pavement Marking Tape

Traffic striping and pavement marking tape must be on the Authorized Material List for signing and delineation materials.

04-19-19

White tape must have an initial retroreflectivity of a minimum 700 mcd/m2.

Yellow tape must have an initial retroreflectivity of a minimum 500 mcd/m2.

10-19-18

When contrast is required for traffic stripping and pavement marking tape, the tape must be pre-formed and retroreflective, consisting of a white film with retroreflective beads and a contrasting black film border. The contrasting black border must be a nonreflective film bonded on each side of the white film to form a continuous roll. Each black border must be a minimum of 2 inches wide. The width of the tape must be at least 4 inches wider than the stripe width.

84-2.02F Two-Component Paint

Two-component traffic paint must be on the Authorized Material List for two component traffic paint.

84-2.02G Paint

Paint must comply with the requirements shown in following table:

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Paint Specifications

Paint type	Color	Specification
Waterborne traffic line	White, yellow, and black	State Specification PTWB-01R2
Waterborne traffic line for the international symbol of accessibility and other curb markings	Blue, red, and green	Federal Specification TT-P-1952E

84-2.02H–84-2.02L Reserved 84-2.03 CONSTRUCTION 84-2.03A General

Establish the alignment for traffic stripes and the layouts for pavement markings with a device or method that will not conflict with other traffic control devices.

Protect existing retroreflective pavement markers during work activities.

Remove existing pavement markers that are coated or damaged by work activities and replace with an equivalent marker on the Authorized Material List for signing and delineation materials.

A completed traffic stripe or pavement marking must:

- 1. Have well defined edges
- 2. Be uniform
- 3. Be free from runs, bubbles, craters, drag marks, stretch marks, and debris

A completed traffic stripe must:

- 1. Be straight on a tangent alignment
- 2. Be a true arc on a curved alignment
- 3. Not deviate from the width shown by more than:
 - 3.1. 1/4 inch on a tangent alignment
 - 3.2. 1/2 inch on a curved alignment

The length of the gaps and individual stripes that form a broken traffic stripe must not deviate by more than 2 inches from the lengths shown. The gaps and stripes must be uniform throughout the entire length of the traffic stripe.

Protect newly placed traffic stripes and pavement markings from traffic and work activities until the traffic stripes and pavement markings are dry or hard enough to bear traffic.

Use mechanical methods to remove dirt, contaminants, and loose material from the pavement surface before applying the traffic stripe or pavement marking.

Use abrasive blast cleaning to remove laitance and curing compound from the surface of new concrete pavement before applying the traffic stripe or pavement marking.

Construct recesses as shown in the following table:

Recess Depth Requirements

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Material	Requirement			
iviaterial	Depth (mils)	Depth (in)		
Thermoplastic	375	3/8		
Two component traffic paint	250	1/4		
Methyl methacrylate traffic paint	250	1/4		

Construct recesses for double traffic stripes in a single pass.

Before applying the traffic stripes and pavement markings:

Road. Safety wire to your meeting at Seriotos dry cathoin the mum of 24 hours Contract No. 5415, CIP No. 72195
May 11, 2021

- 2. Remove all powdery residue from dry recess
- 3. Keep the recesses dry and free from debris

Apply traffic stripes and pavement markings before the end of the same work shift.

84-2.03B Application of Traffic Stripes and Pavement Markings 84-2.03B(1) General

Apply material for a pavement marking with a stencil or a preformed marking.

Immediately remove drips, overspray, improper markings, or material tracked by traffic, using an authorized method.

Apply a traffic stripe or a pavement marking only to a clean, dry surface during a period when the pavement surface temperature is above 50 degrees F.

Apply traffic stripe or pavement marking and glass beads in a single pass. You may apply the glass beads by hand on pavement markings.

Embed glass beads to a depth of 1/2 their diameters.

Distribute glass beads uniformly on traffic stripe and pavement markings.

Glass beads with integral color must match the color of the stripe or pavement marking.

Apply glass beads with two separate applicator guns when two gradations are specified.

Allow enough overlap distance between new and existing striping patterns to ensure continuity at the start and end of the transition.

The retroreflectivity of applied traffic stripes and pavement markings must comply with the requirements shown in the following table:

Retroreflectivity Requirements

		_
Traffic stripe material	White (min, mcd·m-2·lx-1)	Yellow (min, mcd·m ⁻² ·lx ⁻¹)
Paint	250	125
Thermoplastic	250	125
Thermoplastic with wet night enhanced visibility	700	500
Two component	250	125
Methyl methacrylate	500	300
Tape	700	500

84-2.03B(2) Thermoplastic

84-2.03B(2)(a) General

Apply primer or surface preparation adhesive under the manufacturer's instructions:

- 1. To all roadway surfaces except for asphaltic surfaces less than 6 months old
- 2. At a minimum rate of 1 gallon per 300 square feet
- 3. To allow time for the thermoplastic primer to dry and become tacky before application of the thermoplastic

Do not thin the primer.

Preheat thermoplastic using preheaters with mixers having a 360-degree rotation.

Apply thermoplastic in a single uniform layer by spray or extrusion methods.

Completely coat and fill voids in the pavement surface with the thermoplastic.

Apply recessed thermoplastic at a thickness so that the top is 0 to 1/16 inch below the pavement surface.

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84-2.03B(2)(b) Extruded Thermoplastic

Apply extruded thermoplastic at a temperature of 400 to 425 degrees F or as recommended by the manufacturer.

Apply extruded thermoplastic for a traffic stripe at a rate of at least 0.36 lb of thermoplastic per foot of 6-inch-wide solid stripe. The applied traffic stripe must be at least 0.060 inch thick.

Apply extruded thermoplastic pavement markings at a thickness from 0.100 to 0.150 inch.

Apply Type 2 glass beads to the surface of the molten thermoplastic at a rate of at least 8 lb of beads per 100 sq ft.

84-2.03B(2)(c) Sprayable Thermoplastic

Apply sprayable thermoplastic at a temperature of 350 to 400 degrees F.

Apply sprayable thermoplastic for a traffic stripe at a rate of at least 0.24 lb of thermoplastic per foot of 6-inch-wide solid stripe. The applied stripe must be at least 0.040 inch thick.

84-2.03B(2)(d) Thermoplastic with Enhanced Wet-Night Visibility

Apply a thermoplastic traffic stripe or pavement marking with enhanced wet-night visibility in a single pass and in the following order:

- 1. Uniform layer of extruded thermoplastic
- 2. Layer of high-performance glass beads
- 3. Layer of Type 2 glass beads

Apply thermoplastic with enhanced wet-night visibility at a maximum speed of 8 mph.

Apply thermoplastic with enhanced wet-night visibility for a traffic stripe at a rate of at least 0.47 lb of thermoplastic per foot of 6-inch-wide solid stripe. The applied stripe must be at least 0.090 inch thick.

Apply thermoplastic with enhanced wet-night visibility for a pavement marking at a rate of at least 1.06 lb of thermoplastic per square foot of marking. The applied pavement marking must be at least 0.100 inch thick.

Apply high-performance glass beads at a rate of at least 6 lb of glass beads per 100 sq ft of stripe or marking. Apply Type 2, glass beads at a rate of at least 8 lb of glass beads per 100 sq ft of stripe or marking.

84-2.03B(3) Methyl Methacrylate

Apply the methyl methacrylate when the pavement surface and atmospheric temperatures are from 40 to 104 degrees F.

Apply methyl methacrylate paint at a minimum thickness of 0.090 inch.

Apply recessed methyl methacrylate paint at a minimum thickness of 0.200 inch.

Apply the glass beads recommended by the methyl methacrylate manufacturer.

84-2.03B(4) Traffic Striping and Pavement Marking Tape

Do not use traffic stripe and pavement marking tape on existing open graded friction course or chip seal.

Prepare pavement surface and use primer under the traffic tape manufacturer's written instructions. Apply tape to clean and dry pavement surface. Roll or tamp the traffic tape in place.

84-2.03B(5) Two-Component Paint

Apply a two-component painted traffic stripe or pavement marking in a single pass and in the following order:

- 1. Coat of two-component paint
- 2. Application of large gradation glass beads recommended by the two-component paint manufacturer
- 3. Application of Type 1 glass beads

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Apply two-component paint when the pavement surface temperature is above 39 degrees F and the atmospheric temperature is above 36 degrees F. The temperature of the paint must comply with the paint manufacturer's instructions.

Apply two-component paint and glass beads at a maximum speed of 10 mph.

Apply large-gradation glass beads at a minimum rate of 11.7 lb of beads per gallon of paint.

Apply Type 1 glass beads at a minimum rate of 8.3 lb of beads per gallon of paint.

Apply two-component paint for the traffic stripes and pavement markings at the thickness and application rates shown in the following table:

Type of pavement	Stripe thickness (min, inch)	Application rate (min, sq ft/gal)
HMA open graded/chip seal	0.025	64
HMA dense graded	0.020	80
Concrete	0.020	80

Apply recessed two-component paint at a thickness between 0.020 and 0.025 inch.

84-2.03B(6) Paint

Do not apply paint if:

- 1. Fresh paint could become damaged by rain, fog, or condensation
- 2. Atmospheric temperature could drop below 50 degrees F during the drying period

Do not thin paint.

Use mechanical means to paint traffic stripes and pavement markings and to apply glass beads for traffic stripes.

The striping machine must be capable of superimposing successive coats of paint on the 1st coat and on existing stripes at a minimum speed of 5 mph.

Where the configuration or location of a traffic stripe is such that the use of a striping machine is not practicable, you may apply the traffic paint and glass beads by other methods and equipment if authorized.

Apply traffic stripes and pavement markings in 1 coat on existing pavement surfaces, at an approximate rate of 107 sq ft/gal.

Apply traffic stripes and pavement markings in 2 coats on a new pavement surface. The 1st coat of paint must be dry before applying the 2nd coat.

Apply 2-coat paint at the approximate rate of 215 sq ft/gal for each coat.

Paint a 1-coat, 3-inch-wide black stripe between the two 6-inch-wide yellow stripes of a double traffic stripe. If the two 6-inch-wide yellow stripes are applied in 2 coats, apply the black stripe concurrently with the 2nd coat of the yellow stripes.

On 2-lane highways:

- 1. If the 1st coat of the centerline stripe is applied in the same direction as increasing post miles, use the right-hand spray gun of the 3 spray guns to apply a single yellow stripe
- 2. If the 1st coat of the centerline stripe is applied in the same direction as decreasing post miles, use the left-hand spray gun of the 3 spray guns to apply a single yellow stripe
- 3. Apply the 2nd coat of centerline striping in the opposite direction of the 1st coat

Apply glass beads at an approximate rate of 5 lb of beads per gallon of paint.

Verify the application rate of paint by stabbing the paint tank with a calibrated rod. If the striping machine has paint gauges, the Engineer may measure the volume of paint using the gauges instead of stabbing the paint tank with a calibrated rod.

84-2.03B(7) Contrast Striping

04-19-19

Contrast striping consists of black striping placed on each side of a white stripe.

10-19-18

You may use permanent tape instead of paint or thermoplastic.

Apply contrast stripe paint in one coat.

Do not use glass beads or other reflective elements in contrast striping material.

04-19-19

84-2.03B(8)-84-2.03B(10) Reserved

10-19-18

84-2.04 PAYMENT

The payment quantity for a traffic stripe is the length measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe.

The payment quantity for a pavement marking is the area covered.

A double traffic stripe consisting of two-6-inch-wide yellow stripes are measured as 2 traffic stripes except for painted traffic stripes and sprayable thermoplastic traffic stripes. A double sprayable thermoplastic traffic stripe consisting of two 6-inch-wide yellow stripes are measured as single traffic stripe.

A double painted traffic stripe consisting of two 6-inch-wide yellow stripes separated by a 3-inch-wide black stripe is measured as a single traffic stripe.

The payment quantity for contrast striping is the length measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe.

Replace section 84-9 with:

10-19-18

84-9 EXISTING MARKINGS

84-9.01 GENERAL 84-9.01A Summary

Section 84-9 includes specifications for removing existing markings.

Work performed on existing markings must comply with section 15.

84-9.01B Definitions

Reserved

04-19-19

84-9.01C Submittals

10-19-18

Submit your proposed method for removing traffic stripes and pavement markings at least 7 days before starting the removal work. Allow 2 business days for the review.

84-9.02 MATERIALS

Not Used

84-9.03 CONSTRUCTION

84-9.03A General

Remove existing traffic stripes before making any changes to the traffic pattern.

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Remove existing traffic stripes and pavement markings before applying the following materials:

- 1. Traffic stripe and pavement marking tape
- 2. Two component traffic stripes and pavement markings
- 3. Methyl methacrylate traffic stripes and pavement markings

04-19-19

Remove contrast stripes, traffic stripes and pavement markings, including any paint in the gaps, by methods that do not remove pavement to a depth of more than 1/8 inch.

10-19-18

Remove pavement markings such that the old message cannot be identified. Make any area removed by grinding rectangular. Water must not puddle in the ground areas. Fog seal ground areas on asphalt concrete pavement.

Sweep up or vacuum any residue before it can (1) be blown by traffic or wind, (2) migrate across lanes or shoulders, or (3) enter a drainage facility.

84-9.03B Remove Traffic Stripes and Pavement Markings Containing Lead

Reserved

84-9.03C-84-9.03J Reserved

84-9.04 PAYMENT

The payment quantity for remove traffic stripe is the measured length multiplied by:

- 1. 0.67 for a single 4-inch-wide traffic stripe
- 2 1.34 for a single 8-inch-wide traffic stripe
- 3. 2 for a double traffic stripe

The payment quantity for remove traffic stripe does not include the gaps in broken traffic stripes. Payment for removal of paint evident in a gap is included in the payment for remove traffic stripe of the type involved.

If no bid item is shown on the Bid Item List for remove pavement marking, remove pavement marking is paid for as remove traffic stripe of the types shown in the Bid Item List and the payment quantity for 1 square foot of pavement marking is 3 linear feet.

DIVISION X ELECTRICAL WORK 86 GENERAL

^^^^^^

04-19-19 **Replace section 86-1.01B with:**

10-19-18

86-1.01B Definitions

accessible pedestrian signal: Accessible pedestrian signal as defined in the California MUTCD.

accessible walk indication: Activated audible and vibrotactile action during the walk interval.

actuation: Actuation as defined in the California MUTCD.

ambient sound level: Background sound level in dB at a given location.

ambient sound sensing microphone: Microphone that measures the ambient sound level in dB and automatically adjusts the accessible pedestrian signal speaker's volume.

audible speech walk message: Audible prerecorded message that communicates to pedestrians which Road Safetyetrhpsolvenwalks at a value Locations

County of El Dorado
Contract No. 5415, CIP No. 72195

May 11, 2021

AA-57

- **CALIPER:** Commercially Available LED Product Evaluation and Reporting. A U.S. Department of Energy program that individually tests and provides unbiased information on the performance of commercially available LED luminaires and lights.
- **controller assembly:** Assembly for controlling a system's operations, consisting of a controller unit and auxiliary equipment housed in a waterproof cabinet.

controller unit: Part of the controller assembly performing the basic timing and logic functions.

correlated color temperature: Absolute temperature in kelvin of a blackbody whose chromaticity most nearly resembles that of the light source.

detector: Detector as defined in the California MUTCD.

electrolier: Assembly of a lighting standard and luminaire.

flasher: Device for opening and closing signal circuits at a repetitive rate.

illuminance gradient: Ratio of the minimum illuminance on a 1-foot square of sign panel to that on an adjacent 1-foot square of sign panel.

inductive loop detector: Detector capable of being actuated by an inductance change caused by a vehicle passing or standing over the loop. An inductive loop detector includes a loop or group of loops installed in the roadway and a lead-in cable installed and connected inside a controller cabinet.

junction temperature: Temperature of the electronic junction of the LED device. The junction temperature is critical in determining photometric performance, estimating operational life, and preventing catastrophic failure of the LED.

L70: Extrapolated life in hours of the luminaire when the luminous output depreciates 30 percent from the initial values.

lighting standard: Pole and mast arm supporting the luminaire.

link: Part of a system which provides a data connection between a transmitter and receiver.

- **LM-79:** Test method from the Illumination Engineering Society of North America specifying the test conditions, measurements, and report format for testing solid state lighting devices, including LED luminaires.
- **LM-80:** Test method from the Illumination Engineering Society of North America specifying the test conditions, measurements, and report format for testing and estimating the long-term performance of LEDs for general lighting purposes.

luminaire: Assembly that houses the light source and controls the light emitted from the light source.

- **mid-span access method:** Procedure in which fibers from a single buffer tube are accessed and spliced to a multi buffer tube cable without cutting the unused fibers in the buffer tube, or disturbing the remaining buffer tubes in the cable.
- **National Voluntary Laboratory Accreditation Program:** U.S. Department of Energy program that accredits independent testing laboratories.
- **optical time domain reflectometer:** Fiber optic test equipment that is used to measure the total amount of power loss between two points and over the corresponding distance. It provides a visual and printed display of the relative location of system components such as fiber sections, splices and connectors as well as the losses that are attributed to each component and or defects in the fiber.

pedestrian change interval: Pedestrian change interval as defined in the California MUTCD.

powder coating: Coating applied electrostatically using exterior-grade, UV-stable, polymer powder.

power factor: Ratio of the real power component to the complex power component.

power meter: Portable fiber optic test equipment that, when coupled with a light source, is used to Road Safetyolmpenyenta attenuation estimates display indicates the amount of powering Appendix A - RSS May 11, 2021

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source at the designed wavelength of the system under testing that arrives at the receiving end of the link.

pretimed controller assembly: Assembly operating traffic signals under a predetermined cycle length.

programming mechanism: Device to program the accessible pedestrian signal operation.

pull box: Box with a cover that is installed in an accessible place in a conduit run to facilitate the pulling in of wires or cables.

push button information message: Push button information message as defined in the *California MUTCD*.

push button locator tone: Push button locator tone as defined in the California MUTCD.

segment: Continuous cable terminated by 2 splices, 2 connectors or 1 splice and 1 connector.

signal face: Signal face as defined in the California MUTCD.

signal head: Signal head as defined in the *California MUTCD*.

signal indication: Signal indication as defined in the *California MUTCD*.

signal section: Signal section as defined in the *California MUTCD*.

signal standard: Pole with or without mast arms carrying 1 or more signal faces.

street side lumens: Lumens from a luminaire directed to light up areas between the fixture and the roadway, such as traveled ways and freeway lanes.

surge protection device: Subsystem or component that protects equipment against short-duration voltage transients in power line.

total harmonic distortion: Ratio of the rms value of the sum of the squared individual harmonic amplitudes to the rms value of the fundamental frequency of a complex waveform.

traffic-actuated controller assembly: Assembly for operating traffic signals under the varying demands of traffic as registered by detector actuation.

traffic phase: Traffic phase as defined in the California MUTCD.

vehicle: Vehicle as defined in the California Vehicle Code.

vibrotactile pedestrian device: Vibrotactile pedestrian device as defined in the California MUTCD.

10-19-18

Delete the 9th and 10th paragraphs of section 86-1.01C(1).

Replace section 86-1.01C(3) with:

10-19-18

86-1.01C(3) Luminaires

Submit for a luminaire:

- 1. Maximum power in watts
- 2. Maximum designed junction temperature
- 3. Heat sink area in square inches
- 4. Designed junction-to-ambient thermal resistance calculation with thermal resistance components clearly defined
- 5. L70 in hours when extrapolated for the average nighttime operating temperature
- 6. Life expectancy based on the junction temperature
- 7. Manufacturer's data sheet for the power supply, including the rated life

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Submit the manufacturer's QC test data for luminaires as an informational submittal.

Replace section 86-1.01C(4) with:

10-19-18

86-1.01C(4) Reserved

Replace the 3rd paragraph of section 86-1.02B(1) with:

04-19-19

Conduit used for horizontal directional drilling must be high density polyethylene Type IPS, SDR 9 and comply with ASTM F2160.

Replace the 8th paragraph of section 86-1.02B(1) with:

10-19-18

High density polyethylene for innerduct must:

- 1. Comply with ASTM D3485, D3035, D2239, and D2447, and NEMA TC7 and TC2
- 2. Have a minimum tensile yield strength of 3300 psi under ASTM D638

04-19-19

3. Have a density of 59.6187 lb/ft 3 ± 0.3121 lb/ft 3 under ASTM D1505

Replace the 9th paragraph of section 86-1.02B(1) with:

04-19-19

Tracer wire must be a minimum no. 12 solid copper conductor with orange insulation Type TW, THW, RHW, or USE. For direct burial, the tracer wire insulation must be Type UF.

Replace the 4th paragraph of section 86-1.02C(1) with:

10-19-18

The cover marking must include CALTRANS and one of the following:

- SERVICE for service circuits between a service point and service disconnect
- 2. SERVICE IRRIGATION for circuits from a service equipment enclosure to an irrigation controller
- 3. SERVICE BOOSTER PUMP for circuits from a service equipment enclosure to the booster pump
- 4. TDC POWER for circuits from a service equipment enclosure to telephone demarcation cabinet
- 5. LIGHTING for a lighting system
- 6. SIGN ILLUMINATION for a sign illumination system
- 7. SIGNAL AND LIGHTING for a signal and lighting system
- 8. RAMP METER for a ramp metering system
- 9. TMS for a traffic monitoring station
- 10. FLASHING BEACON for a flashing beacon system
- 11. CMS for a changeable message sign system
- 12. INTERCONNECT for an interconnect conduit and cable system
- 13. FIBER OPTIC for fiber optic cable system
- 14. ELECTRICAL SYSTEMS if more than one system is shared in the same pull box

10-19-18

Delete the 3rd paragraph of section 86-1.02C(2).

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Replace the 1st and 2nd paragraphs of section 86-1.02C(3) with:

10-19-18

A traffic pull box and cover must comply with AASHTO HS20-44 and load tested under AASHTO M 306.

The frame must be anchored to the box with 2-1/4-inch-long concrete anchors with a 1/4 inch diameter. A no. 3-1/2(T) pull box must have 4 concrete anchors, one placed in each corner. No. 5(T) and no. 6(T) pull boxes must have 6 concrete anchors, one placed in each corner and one near the middle of each of the longer sides.

Replace section 86-1.02C(4)(b) with:

10-19-18

86-1.02C(4)(b) Tamper-Resistant Nontraffic Pull Box 86-1.02C(4)(b)(i) General

A tamper resistant nontraffic pull box must include a pull box with one of the following:

- 1. Anchored cover
- 2. Lockable cover
- 3. Pull box insert

86-1.02C(4)(b)(ii) Anchored Cover

The anchored cover must:

- 1. Be of 1/2-inch-thick mild steel, hot dip galvanized, post fabrication.
- 2. Be hot dip galvanized after manufacturing with spikes removed from the galvanized surfaces.
- 3. Have a center space for a top lock nut that must be torqued to 200 ft-lb.
- 4. Have a center opening for a stainless steel threaded cap to cover the lock nut.
- 5. Weigh a minimum of 85 lb.
- 6. Include an all-around security skirt of 1/4-inch thick steel. The skirt must be sized to encase a nontraffic pull box or sized to fit within a traffic pull box.
- 7. Be welded to the skirt.

86-1.02C(4)(b)(iii) Lockable Cover

The lockable cover must:

- 1. Be manufactured from minimum 3/16-inch-thick galvanized steel or a polymer of minimum strength equal to 3/16 inch steel.
- 2. Be secured to the pull box with a locking mechanism of equal or greater strength than the manufactured material.
- 3. Have 1/2-by-2-inch slot holes for lifting.
- 4. Have dimensions complying with one of the following:
 - 4.1. Department's standards for pull box covers as shown if the lockable cover is secured to the inside lip of the pull box.
 - 4.2. Department's standards for the length and width as shown for pull box covers if the lockable cover is secured to the top of the pull box.

86-1.02C(4)(b)(iv) Pull Box Insert

The pull box insert must:

- 1. Be made of minimum 3/16-inch-thick or 10 gauge mild hot-dipped galvanized steel
- 2. Have a minimum of 2 mounting brackets that rest under the side or end wall
- 3. Be lockable with a padlock having a minimum 3/8-inch shackle
- 4. Have dimensions complying with the Department's standards for the length and width as shown for pull box covers

Delete section 86-1.02C(4)(d).

10-19-18

Delete section 86-1.02C(4)(e).

10-19-18

Delete section 86-1.02C(4)(f).

Replace section 86-1.02D(3) with:

10-19-18

86-1.02D(3) Warning Tape

Warning tape must be orange color polyolefin film, minimum elongation of 500 percent before breakage, water and corrosion resistant, and comply with requirements shown in the following table:

Warning Tape Requirements

Quality characteristic	Requirement
Thickness (min, mil)	4
Width (in)	4
Tensile strength of	2800
material (min, psi)	
Message spacing	3
intervals (ft)	

The warning tape must have a printed message that reads: CAUTION: CALTRANS FACILITIES BELOW.

The printed text height and color must be 1 inch, black color text over bright orange background.

Replace the 2nd paragraph of section 86-1.02E with:

10-19-18

Each sensor must:

- 1. Have a dissipation factor less than 0.04 nF when measured in the 20 nF range
- 2. Have resistance greater than 20 Megaohms
- 3. Be 1/4 inch wide by 6 feet long by 1/16 inch thick
- 4. Have a RG-58C/U coaxial screen transmission cable, jacketed with high-density polyethylene, rated for direct burial and resistant to nicks and cuts
- 5. Operate over a temperature range from -40 to 160 degrees F
- 6. Have a signal to noise ratio equal to or greater than 10 to 1
- 7. Have an output signal of a minimum 250 mV ± 20 percent for a wheel load of 400 lb at 55 mph and 70 degrees F
- 8. Have an insulation resistance greater than 500 $M\Omega$
- 9. Have a life cycle of a minimum 25 million equivalent single axle loadings

Replace section 86-1.02F(1) with:

10-19-18

86-1.02F(1) General

Conductors and cables must be clearly and permanently marked the entire length of their outer surface with:

1. Manufacturer's name or trademark

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- 3. Conductor size
- 4. Voltage
- 5. Number of conductors for a cable

The minimum insulation thickness and color code requirements must comply with NEC.

Replace the 2nd paragraph of section 86-1.02F(2)(a) with:

10-19-18

Conductors must be identified as shown in the following table:

Conductor Identification

			Identification		
	Signal phase or	Insulation	on color	Band	Copper
Circuit	function	Base	Stripe ^a	symbols	size

					4.4
	2, 6	Red, yellow, brown	Black	2, 6	14
	4, 8	Red, yellow, brown	Orange	4, 8	14
	1, 5	Red, yellow, brown	None	1, 5	14
Signals (vehicle) ^{a,b}	3, 7	Red, yellow, brown	Purple	3, 7	14
	Ramp meter 1	Red, yellow, brown	None	No band required	14
	Ramp meter 2	Red, yellow, brown	Black	No band required	14
	2p, 6p	Red, brown	Black	2p, 6p	14
	4p, 8p	Red, brown	Orange	4p, 8p	14
Pedestrian signals	1p, 5p	Red, brown	None	1p, 5p	14
	3p, 7p	Red, brown	Purple	3p, 7p	14
Push button	2p, 6p	Blue	Black	P-2, P-6	14
assembly or	4p, 8p	Blue	Orange	P-4, P-8	14
assembly of	1p, 5p	Blue	None	P-4, P-6	14
pedestrian signal	3p, 7p	Blue	Purple	P-1, P-5 P-3, P-7	14
podestriari signal	Ungrounded circuit	Black	None	CON-1	6
Traffic signal	conductor	DIACK	INOTIE	COIN-I	U
controller cabinet	Grounded circuit	White	None	CON-2	6
John Gubinet	conductor	VVIIILE	NONE	0014-2	
	Ungrounded - line 1	Black	None	No band	14
	Singi Suriusu - IIIIO I	Bidon	140110	required	17
Highway lighting	Ungrounded - line 2	Red	None	No band	14
pull box to	3g. 23.1434 IIIIO Z	""	. 10.10	required	
luminaire	Grounded	White	None	No band	14
			-	required	
NACIONAL DE LA CALIFORNIA DE LA CALIFORN	Ungrounded - line 1	Black	None	ML1	10
Multiple highway	Ungrounded - line 2	Red	None	ML2	10
lighting	Ungrounded - line 3	White	None	ML3	10
	Ungrounded - Photoelectric unit	Black	None	C1	14
Lighting control	Switching leg from Photoelectric unit or SM transformer	Red	None	C2	14
	Ungrounded - line 1 (signals)	Black	None	No band required	6
Service	Ungrounded - line 2 (lighting)	Red	None	No band required	8
	Ungrounded - line 1	Black	None	SL-1	10
Sign lighting	Ungrounded - line 2	Red	None	SL-2	10
	Ungrounded	Red or yellow	None	FB-	14
Flashing beacons	between flasher and beacons	Aca of yollow	140110	Location.c	17
Crown dod - iit	Push button assembly or accessible pedestrian signal	White	Black	No band required	14
Grounded circuit conductor	Signals and multiple lighting	White	None	No band required	10
	Flashing beacons and sign lighting	White	None	No band required	12
	Lighting control	White	None	C-3	14
	<u> </u>				·

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	Service	White	None	No band	14
				required	
Railroad preemption		Black	None	R	14
Spares		Black	None	No band required	14

Notes:

10-19-18

Delete the 4th paragraph of section 86-1.02F(2)(a).

Replace the 2nd paragraph of section 86-1.02F(2)(c)(ii) with:

10-19-18

An equipment grounding conductor must be insulated.

Replace the 3rd paragraph of section 86-1.02F(3)(d)(ii) with:

10-19-18

Cable must comply with the requirements shown in the following table:

Cable	Conductor	Cable jack	et thickness	Maximum	Conductor color code
type	quantity and	(m	nils)	nominal	
	type	Average	Minimum	outside	
				diameter	
				(inch)	

^aOn overlaps, the insulation is striped for the 1st phase in the designation, e.g., phase (2+3) conductor is striped as for phase 2.

^bBand for overlap and special phases as required

^cFlashing beacons having separate service do not require banding.

SCSC 3 no. 14 44 36 0.40 Blue/black stripe, blue/crange stripe, white/black stripe plue/crange stripe, white/black stripe plue/crange stripe, white/black stripe plue/crange stripe, white/black stripe, white/black stripe, brown/black stripe, white/black stripe, brown/black stripe, brown/orange stripe, red/silver stripe, red/orange stripe, red/silver stripe, brown/orange stripe, pellow/silver stripe, brown/orange stripe, red/silver stripe, brown/orange stripe, blue/orange stripe, blue/silver stripe, white/black stripe, blue/silver stripe, white/black stripe, blue/silver stripe, blue/silve		T		1	1	
SCSC 5 no. 14 44 36 0.50 Red yellow, brown, black, white black, white stripe, brown/black stripe, yellow/black stripe, yellow/black stripe, brown/black stripe, pred/shite stripe, brown/black stripe, prown/srange stripe, yellow/sliver stripe, yellow/sliver stripe, yellow/sliver stripe, pred/black stripe, brown/brown/srange stripe, brown/brown/srange stripe, prown/srange stripes, brown/srange stripes, blue/srange stripe, bl	3CSC	3 no. 14	44	36	0.40	Blue/black stripe,
SCSC 5 no. 14 44 36 0.50 Red yellow, brown, black, white black, white stripe, brown/black stripe, yellow/black stripe, yellow/black stripe, brown/black stripe, pred/shite stripe, brown/black stripe, prown/srange stripe, yellow/sliver stripe, yellow/sliver stripe, yellow/sliver stripe, pred/black stripe, brown/brown/srange stripe, brown/brown/srange stripe, prown/srange stripes, brown/srange stripes, blue/srange stripe, bl						blue/orange stripe,
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Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

Replace the 3rd paragraph of section 86-1.02G with:

10-19-18

The self-adhesive reflective labels must:

- 1. Be from 3 to 5 mils thick
- 2. Have all black capital characters on a white background
- 3. Extend beyond the character by a minimum of 1/4 inch

Replace the 4th paragraph of section 86-1.02H with:

10-19-18

PVC electrical tape must have a minimum thickness of 6 mils.

Replace section 86-1.02K with:

10-19-18

86-1.02K Luminaires 86-1.02K(1) General

A luminaire must:

- 1. Be self-contained, not requiring assembly.
- 2. Comply with UL 1598 for luminaires in wet locations.
- 3. Have a power supply with ANSI/IEC rating of at least IP65.
- 4. Weigh less than 35 lb.
- 5. Have a minimum operating life of 100,000 hours when operated for an average time of 11.5 hours at an average temperature of 70 degrees F.
- 6. Operate over a temperature range from -40 to 130 degrees F.
- 7. Be operationally compatible with photoelectric controls.
- 8. Have a correlated color temperature range from 2700 to 3500 K and a color rendering index of 70 or greater.
- 9. Have a maximum-effective projected area of 1.4 sq ft when viewed from either side or end.
- 10. Comply with California Test 611.
- 11. Have a power factor of 0.90 or greater. The total harmonic distortion, current, and voltage induced into a power line by a luminaire must not exceed 20 percent.
- 12. Comply with the maximum power consumption and isofootcandle curves as shown.
- 13. Be on the Authorized Material List for LED luminaires or must be submitted for testing and addition to the AML.

A luminaire must include a surge protection device to withstand high-repetition noise transients caused by utility line switching, nearby lightning strikes, and other interferences. The device must protect the luminaire from damage and failure due to transient voltages and currents as defined in Tables 1 and 4 of ANSI/IEEE C64.41.2 for location category C-High. The surge protection device must comply with UL 1449 and ANSI/IEEE C62.45 based on ANSI/IEEE C62.41.2 definitions for standard and optional waveforms for location category C-High.

The luminaire must operate over the entire voltage range from 120 to 480 V(ac), 60 ± 3 Hz or one of the following:

- 1. From 95 to 277 V(ac) for luminaires rated 120 V(ac) or 240 V(ac)
- 2. From 347 to 480 V(ac) for luminaires rated 480 V(ac)

The fluctuations of line voltage must have no visible effect on the luminous output.

The L70 of the luminaire must be the minimum operating life or greater. Illuminance measurements must be calibrated to standard photopic calibrations.

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The luminaire's housing must withstand a 1008 hour cyclic salt fog spray/UV test under ASTM D5894 and an evaluation under ASTM D714 with a blister size of 8 or greater and no more than medium density.

The luminaire's housing must be marine-grade alloy with less than 0.2 percent copper or die cast aluminum. All exposed aluminum must be anodized. A chromate conversion undercoating must be used underneath a thermoplastic polyester powder coat.

External bolts, screws, hinges, hinge pins, and door closure devices must be corrosion resistant.

The housing must be designed to prevent the buildup of water on its top surface. Exposed heat sink fins must be oriented to allow water to run off the luminaire and carry dust and other accumulated debris away from the unit. The optical assembly of the luminaire must be protected against dust and moisture intrusion to at least an UL 60529 rating of IP66. The power supply enclosure must be protected to at least an UL 60529 rating of IP43.

If the components are mounted on a down-opening door, the door must be hinged and secured to the luminaire's housing separately from other components. The door must be secured to the housing to prevent accidental opening. A safety cable must mechanically connect the door to the housing.

A luminaire must have a barrier-type terminal block secured to the housing to connect field wires. The terminal screws must be captive and equipped with wire grips for conductors up to no. 6.

The conductors and terminals must be identified and marked.

If needed, each refractor or lens must be made of UV-inhibiting high-impact plastic, such as acrylic or polycarbonate, or heat and impact-resistant glass. The refractor or lens must be resistant to scratching. Polymeric materials, except for the lenses of enclosures containing either the power supply or electronic components of the luminaire, must be made of UL94 V-0 flame-retardant materials.

The luminaire must be permanently marked inside the unit and outside of its packaging box. Marking consists of:

- 1. Manufacturer's name or trademark
- 2. Month and year of manufacture
- 3. Model, serial, and lot numbers
- 4. Rated voltage, wattage, and power in VA

An LED luminaire must:

- 1. Comply with Class A emission limits under 47 CFR 15(B) for the emission of electronic noise.
- 2. Have a power supply with:
 - 2.1. 2 leads to accept standard 0-10 V(dc).
 - 2.2. Dimming control compatible with IEC 60929, Annex E. If the control leads are open or the analog control signal is lost, the circuit must default to 100-percent power.
 - 2.3. Case temperature self rise of 77 degrees F or less above ambient temperature in free air with no additional heat sinks.
- 3. Have passive thermal management with enough capacity to ensure proper heat dissipation and functioning of the luminaire over its minimum operating life. The maximum junction temperature for the minimum operating life must not exceed 221 degrees F.
- 4. Have a junction-to-ambient thermal resistance of 95 degrees F per watt or less.
- 5. Contain circuitry that automatically reduces the power to the LEDs so the maximum junction temperature is not exceeded when the ambient temperature is 100 degrees F or greater.
- 6. Have a heat sink made of aluminum or other material of equal or lower thermal resistance. The use of fans or other mechanical devices is not allowed for cooling the luminaire.

The catastrophic loss or failure of 1 LED must not result in the loss of more than 20 percent of the total luminous output of the LED luminaire.

86-1.02K(2) Roadway Luminaires

A roadway luminaire must:

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- Have a housing color that matches a color no. 26152 to 26440, 36231 to 36375, or 36440 of AMS-STD-595
- 2. Have an ANSI C136.41-compliant, locking-type, photocontrol receptacle with dimming connections and a watertight shorting cap
- 3. Not allow more than 2.5 percent of the rated lumens to project above 80 degrees measured up from the vertical plane in the direction of the roadway
- 4. Have equipment identification character labels outside the unit on the side that will face the road. Equipment identification characters consist of:
 - 4.1. R1 for Roadway 1, R2 for Roadway 2, R3 for Roadway 3, and R4 for Roadway 4
 - 4.2. Rated wattage

The luminaire's housing must have a slip fitter that must:

- 1. Fit on mast arms with outside diameters from 1-5/8 to 2-3/8 inches
- 2. Be adjustable to a minimum of ±5 degrees from the axis of the tenon in a minimum of 5 steps: +5, +2.5, 0, -2.5, -5
- 3. Have clamping brackets that:
 - 3.1. Are made of corrosion-resistant materials or treated to prevent galvanic reactions
 - 3.2. Do not bottom out on the housing bosses when adjusted within the designed angular range
 - 3.3. Do not permanently set in excess of 1/32 inch when tightened

86-1.02K(3) Overhead Sign Luminaires

An overhead sign luminaire must:

- 1. Have a uniformity average to minimum ratio of 10:1 for the distribution of light reflected on a 16' wide by 10' high sign panel
- 2. Not allow more than 2.5 percent of the rated lumens to project above 65 degrees measured up from the horizontal plane in the direction of the sign panel
- 3. Mount at a maximum height of 12 inches above the top of the mounting rails
- 4. Mount directly to the sign structure as shown or with a mounting adapter that meets the material requirements of the luminaire's housing

Replace section 86-1.02M with:

10-19-18

86-1.02M Photoelectric Controls

Photoelectric control types are as shown in the following table:

Photoelectric Control Types

Control type	Description
I	Pole-mounted photoelectric unit. Test switch and a 15-A circuit breaker per
	ungrounded conductor, housed in an enclosure.
II	Pole-mounted photoelectric unit. Contactor, a 15-A circuit breaker per ungrounded
	conductor, and test switch located in a service equipment enclosure.
III	Pole-mounted photoelectric unit. Contactor, a 15-A circuit breaker per ungrounded
	conductor, and a test switch housed in an enclosure.
IV	A photoelectric unit that plugs into a NEMA twist-lock receptacle, integral with the
	luminaire.
V	A photoelectric unit, contactor, a 15-A circuit breaker per ungrounded conductor,
	and test switch located in a service equipment enclosure.

The pole-mounted adaptor for Type I, II, and III photoelectric controls must include a terminal block and cable supports or clamps to support the wires.

Photoelectric unit must:

1. Have a screen to prevent artificial light from causing cycling.

Road. Saffetyel na proting note folls late / 1405 tils 200 (atic) note 10-240 V(ac), or 105-240 V(ac). Contract No. 5415, CIP No. 72195 May 11, 2021

- 3. Operate at a temperature range from -20 to 55 degrees C.
- 4. Consume less than 10 W.
- 5. Be a 3-prong, twist-lock type with a NEMA IP 65 rating, ANSI C136.10-compliant.
- 6. Have a fail-on state.
- 7. Fit into a NEMA-type receptacle.
- 8. Turn on from 1 to 5 footcandles and turn off from 1.5 to 5 times the turn-on level. Measurements must be made by procedures in *EEI-NEMA Standards for Physical and Electrical Interchangeability of Light-Sensitive Control Devices Used in the Control of Roadway Lighting.*

Type I, II, III, and V photoelectric controls must have a test switch to allow manual operation of the lighting circuit. Switch must be:

- 1. Single-hole mounting, toggle type
- 2. 15 A, single pole and single throw
- 3. Labeled Auto-Test on a nameplate

Photoelectric control's contactor must be:

- 1. Normally open
- 2. Mechanical-armature type with contacts of fine silver, silver alloy, or equal or better material
- 3. Installed to provide a minimum space of 2-1/2 inches between the contactor terminals and the enclosure's sides

The terminal blocks must be rated at 25 A, 600 V(ac), molded from phenolic or nylon material, and be the barrier type with plated-brass screw terminals and integral marking strips.

Replace section 86-1.02N with:

10-19-18

86-1.02N Fused Splice Connectors

The fused splice connector for 240 and 480 V(ac) circuits must simultaneously disconnect both ungrounded conductors. The connector must not have exposed metal parts except for the head of the stainless steel assembly screw. The head of the assembly screw must be recessed a minimum of 1/32 inch below the top of the plastic boss that surrounds the head.

The connector must protect the fuse from water or weather damage. Contact between the fuse and fuse holder must be spring loaded.

Fuses must:

- 1. Be standard, midget, ferrule type
- 2. Have a nontime-delay feature
- 3. Be 13/32 by 1-1/2 inches

Fuse ratings for luminaires are shown in the following table:

Fuse Current Rating Requirements

r acc carront reating recquirements					
Circuit	Fuse voltage	Soffit and roadway			
voltage	rating	luminaires			
120 V(ac)	250 V(ac)	5 A			
240 V(ac)	250 V(ac)	5 A			
480 V(ac)	500-600 V(ac)	5 A			

Fuse ratings for transformers are shown in the following table:

Fuse Current Rating Requirements

Circuit voltage	Fuse voltage	Fuse current rating for				
	rating	Single phase (two wires) Transformers (primary side)				
		1 kVA	2 kVA	3 kVA		
120 V(ac)	250 V(ac)	10 A	20 A	30 A		
240 V(ac)	250 V(ac)	6 A	10 A	20 A		
480 V(ac)	500-600 V(ac)	3 A	6 A	10 A		

Replace section 86-1.02P(1) with:

10-19-18

86-1.02P(1) General

The enclosures must be rated NEMA 3R and include a dead front panel and a hasp with a 7/16-inch-diameter hole for a padlock.

Except for a service equipment enclosure, an enclosure must:

- 1. Be manufactured from steel and either galvanized, cadmium plated, or powder coated
- 2. Mount to a standard, pole, post, or sign structural frame
- 3. Provide a minimum space of 2-1/2 inches between the internal components and the enclosure's sides

The enclosure's machine screws and bolts must not protrude outside the cabinet wall.

The fasteners on the exterior of an enclosure must be vandal resistant and not be removable. The exterior screws, nuts, bolts, and washers must be stainless steel.

Replace the 1st paragraph of section 86-1.02P(2) with:

04-19-19

Service equipment enclosure must:

- 1. Comply with the Electric Utility Service Equipment Requirements Committee
- 2. Meet the requirements of the service utility
- 3. Be watertight
- 4. Be factory wired and manufactured from steel and galvanized or have factory-applied, rust-resistant prime and finish coats, except Types II and III
- 5. Be marked as specified in NEC to warn of potential electric-arc flash hazards

04-19-19

Delete the 5th paragraph of 86-1.02P(2).

Add between 6th and 7th paragraphs of section 86-1.02P(2):

10-19-18

Service equipment enclosure must have the meter view windows located on the front side of the enclosure for Types III-AF, BF, CF and DF.

Service equipment enclosure must have the meter view windows located on the back side of the enclosure for Types III-AR, BR, CR and DR.

Replace the 7th paragraph of section 86-1.02P(2) with:

04-19-19

The meter area must have a sealable, lockable, weather-tight cover that can be removed without the use Road Safety Improvements at Various Locations

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Delete the 2nd sentence of the 9th paragraph of section 86-1.02P(2).

10-19-18

Delete section 86-1.02P(3).

Replace section 86-1.02Q(4)(a) with:

10-19-18

86-1.02Q(4)(a) General

The doors of a telephone demarcation cabinet must be attached using continuous aluminum steel piano hinges.

Add between the 2nd and 3rd paragraphs of section 86-1.02R(2):

10-19-18

Bracket arms must be long enough to allow proper alignment of signals and backplate installation.

Replace item 2 in the list in the 5th paragraph of section 86-1.02R(4)(a)(iii) with:

10-19-18

 Be a black color throughout, including the door, matching color no. 17038, 27038, or 37038 of AMS-STD-595

Add to the beginning of section 86-1.02T:

04-19-19

Accessible pedestrian signal must be on the Authorized Material List for Accessible Pedestrian Signals.

Replace the 5th and 6th paragraphs of section 86-1.02T with:

10-19-18

The color of a metallic housing must match color no. 33538 of AMS-STD-595.

The color of a plastic housing must match color no. 17038, 27038, or 37038 of AMS-STD-595.

Replace the 7th paragraph of section 86-1.02T with:

04-19-19

Accessible pedestrian signal must:

- 1. Have controllable and programmable volume level and messaging
- 2. Be weatherproof and shockproof

Replace the 11th paragraph of section 86-1.02T with:

10-19-18

The cable between the accessible pedestrian signal assembly and the pedestrian signal head must be rated for outdoor use and have a:

- 1. Minimum four no. 18 stranded or larger tinned copper conductors with a minimum insulation thickness of 15 mils
- 2. Cable jacket with a minimum thickness of 20 mils and rated for a minimum:

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- 2.2. 80 degrees C
- 3. Nominal outside diameter less than 350 mils
- 4. Conductor color code of black, white, red and green

Replace the 1st paragraph of section 86-1.02U with:

10-19-18

The housing for a push button assembly must be made of die-cast aluminum, permanent mold-cast aluminum, or UV-stabilized self-extinguishing structural plastic.

The housing must have a uniform color that matches color no. 17038, 27038, or 37038 of AMS-STD-595.

Replace the 2nd paragraph of section 86-1.02W(4) with:

10-19-18

The cured hot-melt rubberized asphalt sealant must comply with the requirements shown in the following table:

Cured Hot-Melt Rubberized Asphalt Sealant Requirements

outed flot with Russellzed Asphalt Scalant Requirements				
Quality characteristic	Test method	Requirement		
Cone penetration, 25 °C, 150 g, 5 s (max, 1/10 mm)		35		
Flow, 60 °C, 5 hr (max, mm)	ASTM D5329	5		
Resilience, 25 °C (min, %)		25		
Softening point (min, °C)	ASTM D36	82		
Ductility, 25 °C, 5 cm/min (min, cm)	ASTM D113	30		
Flash point, Cleveland Open Cup (min, °C)	ASTM D92	288		
Viscosity, no. 27 spindle, 20 rpm, 190 °C (Pa•s)	ASTM D4402	2.5-3.5		

Replace the 2nd paragraph of section 86-1.02Y with:

10-19-18

A transformer must be a dry type designed for operation on a 60 Hz supply. The transformer must have a decal showing a connection diagram. The diagram must show either color coding or wire tagging with primary (H1, H2) or secondary (X1, X2) markers and the primary and secondary voltage and volt-ampere rating. A transformer must comply with the electrical requirements shown in the following table:

Transformer Electrical Requirements

Quality characteristic	Requirement	
Rating (V(ac))	120/240, 120/480, 240/120, 240/480, 480/120, or 480/240	
Efficiency (%)	> 95	
Secondary voltage regulation and tolerance from half load to full load (%)	±3	

87 ELECTRICAL SYSTEMS

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04-19-19

Replace Reserved in section 87-1.01C with:

10-19-18

Submit a digital file for geographic information system mapping for: Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

- 1. Conduit
- 2. Pull boxes
- 3. Cabinets
- 4. Service equipment enclosures
- 5. Standards

The digital file must consist of:

- Longitudinal and latitude coordinates, under the WGS84 reference coordinate system. The
 coordinates must be in decimal format having 6 significant figures after the decimal point.
 Coordinates must be read at the center of pull boxes, cabinet, standards, and service equipment
 enclosures; and on top of conduit at 20-foot intervals before backfill.
- 2. Type, depth and size for conduits.
- 3. Type for pull boxes, standards, cabinets, and service equipment enclosures.

Replace item 4 in the list in the 1st paragraph of section 87-1.01D(2)(a) with:

10-19-18

4. Luminaires

Replace section 87-1.01D(2)(d) with:

10-19-18

87-1.01D(2)(d) Piezoelectric Axle Sensors

Piezoelectric axle sensors test consists of:

- 1. Demonstrating for each sensor:
 - 1.1. Capacitance is within 20 percent of the value shown on the sensor's data sheet
 - 1.2. Dissipation factor is less than 0.04 nF when measured in the 20 nF range
 - 1.3. Resistance is greater than 20 Megaohms
- 2. Collecting a minimum of 100 vehicle records for each lane and demonstrating:
 - 2.1. Volume is within ±3 percent accuracy
 - 2.2. Vehicle classification is within 95 percent accuracy by type

Replace the 7th paragraph of section 87-1.03A with:

10-19-18

Notify the Engineer immediately if an existing facility is damaged by your activities:

- 1. Damaged existing traffic signal systems must be repaired or replaced within 24 hours. If the system cannot be fixed within 24 hours or it is located on a structure, provide a temporary system until the system can be fixed.
- 2. Damaged existing lighting systems must be repaired or replaced by nightfall. If the system cannot be fixed by nightfall, provide a temporary system until the system can be fixed.

Add to the end of section 87-1.03A:

10-19-18

Collect the geographic information system mapping data.

Replace the 12th paragraph of section 87-1.03B(1) with:

10-19-18

For Type 1, 2, and 5 conduits, use threaded bushings and bond them using a jumper. For other types of Road Safety improvements at Various Locations

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Replace the 3rd paragraph of section 87-1.03B(3)(a) with:

10-19-18

Place a minimum of 2 inches of sand bedding in a trench before installing the conduit and 18 inches of slurry cement over the conduit before placing additional backfill material.

The slurry must be pigmented to match AMS-STD-595.

Replace the 1st sentence in the 6th paragraph of section 87-1.03B(3)(c) with:

10-19-18

Backfill trench with slurry concrete under section 19-3.02E.

Replace the 9th paragraph of section 87-1.03B(3)(c) with:

10-19-18

Install innerducts as one continuous unit between vaults. Innerducts may be interrupted inside pull boxes located between vaults and cabinets.

Replace section 87-1.03D with:

10-19-18

87-1.03D Reserved

Replace section 87-1.03E(2) with:

04-19-19

Dig a trench for the electrical conduits or direct burial cables. Do not excavate until the installation of the conduit or direct burial cables.

Place excavated material in a location that will not interfere with traffic or surface drainage.

After placing the conduit or direct burial cable, backfill the trench.

Compact the backfill to a minimum relative compaction of:

- 1. 95 percent when placed within the hinge points and in areas where pavement is to be constructed
- 2. 90 percent when placed outside the hinge points and not under pavement

Restore the sidewalks, pavement, and landscaping at a location before starting excavation at another location.

Replace section 87-1.03E(3) with:

10-19-18

87-1.03E(3) Concrete Pads, Foundations, and Pedestals

Construct foundations for standards, poles, metal pedestals, and posts under section 56-3.

Construct concrete pads, foundations, and pedestals for controller cabinets, telephone demarcation cabinets, and service equipment enclosures on firm ground.

Install anchor bolts using a template to provide proper spacing and alignment. Moisten the forms and ground before placing the concrete. Keep the forms in place until the concrete sets for at least 24 hours to prevent damage to the surface.

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Construct a pad in front of a Type III service equipment enclosure. The pad must be 24 inches in length, 4 inches in thickness, and must match the width of the foundation.

In unpaved areas, place the top of the foundation 6 inches above the surrounding grade, except place the top:

- 1. 1 foot 6 inches above the grade for 336L cabinets
- 2. 1 foot 8 inches above the grade for Type C telephone demarcation cabinets
- 3. 2 inches above the grade for Type III service equipment enclosures

The pad must be 2 inches above the surrounding grade in unpaved areas.

In and adjacent to the sidewalk and other paved areas, place the top of the foundation 4 inches above the surrounding grade, except place the top:

- 1. 1 foot 6 inches above the grade for 336L cabinets
- 2. 1 foot 8 inches above the grade for Type C telephone demarcation cabinets
- 3. Level with the finished grade for Type G and Type A cabinets and Type III service equipment enclosures

The pad must be level with the finished grade in paved areas.

Apply an ordinary surface finish under section 51-1.03F.

Allow the foundation to cure for at least 7 days before installing any equipment.

Replace the last paragraph of section 87-1.03F(1) with:

04-19-19

Install a tracer wire.

Replace the 1st paragraph of section 87-1.03F(3)(c)(ii) with:

10-19-18

Install a Type 1 or 2 inductive loop conductor except use Type 2 for Type E and F loop detectors.

10-19-18

Delete the last paragraph of section 87-1.03G.

Replace the 4th paragraph of section 87-1.03H(2) with:

10-19-18

Use Method B as follows:

- Cover the splice area completely with an electrical insulating coating and allow it to dry.
- 2. Apply 3 layers of half-lapped, PVC electrical tape.
- 3. Apply 2 layers of butyl-rubber, stretchable tape with liner.
- 4. Apply 3 layers of half-lapped, PVC, pressure-sensitive, adhesive tape.
- 5. Cover the entire splice with an electrical insulating coating and allow it to dry.

Replace section 87-1.03N with:

10-19-18

87-1.03N Fused Splice Connectors

Install a fuse splice connector with a fuse in each ungrounded conductor for luminaires, except for overhead sign luminaires. The connector must be located in the pull box adjacent to the luminaires.

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If the pull box for the roadway luminaire is tamper resistant, install a fuse splice connector with 10 A fuse in the pull box and an additional fuse splice connector with a 5 A fuse in the handhole.

Install a fuse splice connector with a fuse on primary side of transformer.

Crimp the connector terminals onto the ungrounded conductors using a tool under the manufacturer's instructions. Insulate the terminals and make them watertight.

Add to the end of section 87-1.03T:

10-19-18

When replacing an existing accessible pedestrian signal, the housing color must match the color of the existing housing.

Add to the end of section 87-1.03U:

10-19-18

When replacing an existing push button assembly, the housing color must match the color of the existing housing.

Add between the 1st and 2nd paragraphs of section 87-1.03Y:

04-19-19

Use a submersible type transformer inside pull boxes.

Replace the 2nd paragraph of section 87-2.03A with:

10-19-18

Tighten the cap screws of the luminaire's clamping bracket to 10 ft-lb for roadway luminaires.

Replace section 87-3 with:

10-19-18

87-3 SIGN ILLUMINATION SYSTEMS

87-3.01 GENERAL

Section 87-3 includes specifications for constructing sign illumination systems.

Sign illumination system includes:

- 1. Foundations
- 2. Pull boxes
- 3. Conduit
- 4. Conductors
- 5. Overhead sign luminaires
- 6. Service equipment enclosure
- 7. Photoelectric control

The components of a sign illumination system are shown on the project plans.

87-3.02 MATERIALS

Reserved

87-3.03 CONSTRUCTION

Perform the conductor test.

Install overhead sign luminaires under the manufacturer's instructions. Road Safety Improvements at Various Locations

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Do not modify the sign structure or mounting channels.

Perform the operational tests for the system.

87-3.04 PAYMENT

Not Used

Replace section 87-4.01D with:

10-19-18

87-4.01D Quality Assurance

Reserved

Replace section 87-4.02B with:

10-19-18

87-4.02B Battery Backup System

A battery backup system includes the cabinet, batteries, and the Department-furnished electronics assembly.

The electronics assembly includes the inverter/charger unit, power transfer relay, manually-operated bypass switch, battery harness, utility interconnect wires, battery temperature probe, and relay contact wires.

Replace the 2nd sentence in the 15th paragraph of section 87-4.02C with:

10-19-18

The background must comply with color no. 14109 of AMS-STD-595.

Replace section 87-4.03B with:

10-19-18

87-4.03B Battery Backup System Cabinets

Install the battery backup system cabinet to the right of the controller cabinet.

If installation on the right side is not possible, obtain authorization for installation on the left side.

Provide access for power conductors between the cabinets using:

- 1. 2-inch nylon-insulated, steel chase nipple
- 2. 2-inch steel sealing locknut
- 3. 2-inch nylon-insulated, steel bushing

Remove the jumper between the terminals labeled BBS-1 and BBS-2 in the 5 position terminal block in the controller cabinet before connecting the Department-furnished electronics assembly.

Replace section 87-7.02 with:

10-19-18

87-7.02 MATERIALS

Flashing beacon control assembly includes:

- 1. Enclosure.
- 2. Barrier-type terminal blocks rated for 25 A, 600 V(ac), made of molded phenolic or nylon material and have plated-brass screw terminals and integral marking strips.
- 3. Solid state flasher complying with section 8 of NEMA standards publication no. TS 1 for 10 A, dual Road Safety in provements at Various Locations County of El Dorado Contract No. 5415, CIP No. 72195 **AA-78**

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- 4. 15-A, circuit breaker per ungrounded conductor.
- 5. Single-hole-mounting toggle type, single-pole, single-throw switches rated at 12-A, 120 V(ac). Switches must be furnished with an indicating nameplate reading *Auto Test*. A 15-A circuit breaker may be used in place of the toggle switch.

Replace 87-8 with:

10-19-18

87-8 PEDESTRIAN HYBRID BEACON SYSTEMS

87-8.01 GENERAL

87-8.01A Summary

Section 87-8 includes specifications for constructing pedestrian hybrid beacon system.

A pedestrian hybrid beacon system includes:

- 1. Foundations
- 2. Pull boxes
- 3. Conduit
- 4. Conductors and cables
- Standards
- 6. Pedestrian hybrid beacon face
- 7. Pedestrian signal heads
- 8. Service equipment enclosure
- 9. Department-furnished controller assembly
- 10. Accessible pedestrian signals
- 11. Push button assemblies
- 12. Luminaires
- 13. Fuse splice connectors
- 14. Battery backup system

The components of a pedestrian hybrid beacon system are shown on the project plans.

87-8.01B Definitions

Reserved

87-8.01C Submittals

Reserved

87-8.01D Quality Assurance

87-8.01D(1) General

Reserved

87-8.01D(2) Quality Control

Verify the sequence for the pedestrian hybrid beacon system per California Chapter 4F, Figure 3F-3 "Sequence for a Pedestrian Hybrid Beacon" during the operational test.

Test the battery backup system under section 87-1.01D(2)(c).

87-8.02 MATERIALS

87-8.02A General

The system must comply with California MUTCD, Chapter 4F.

The battery backup system must comply with section 87-4.02B.

87-8.02B Pedestrian Hybrid Beacon Face

A pedestrian hybrid beacon face consists of three 12-inch signal heads.

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87-8.03 CONSTRUCTION

Install pedestrian hybrid beacon system under sections 87-4.03A and 87-4.03B.

87-8.04 PAYMENT

Not Used

Replace the 1st paragraph of section 87-12.03 with:

10-19-18

Install changeable message sign on sign structure under section 56-2.

Replace section 87-14.02 with:

10-19-18

87-14.02 MATERIALS 87-14.02A General

Vehicle speed feedback sign consists of a housing, display window, and radar unit.

Sign must:

- 1. Comply with the California MUTCD, Chapter 2B
- 2. Have an operating voltage of 120 V(ac) for permanent installations
- 3. Have a maximum weight of 45 lb
- 4. Have a wind load rating of 90 mph
- 5. Have an operating temperature range from -34 to 165 degrees F
- 6. Have a retroreflective white sheeting background

87-14.02B Housings

Housing must:

- 1. Be weatherproof (NEMA 3R or better) and vandal resistant
- 2. Be made of 0.09-inch-gauge welded aluminum with the outer surfaces being UV resistant
- 3. Have the manufacturer's name, model number, serial number, date of manufacture, rated voltage and rated current marked inside
- 4. Have the internal components easily accessible for field repair without removal of the sign

87-14.02C Display Windows

Display window consists of a cover, LED character display, and dimming control. Character display and cover must deflect together without damage to the internal electronics and speed detection components.

Cover must be:

- 1. Vandal resistant and shock absorbent
- 2. Field replaceable with the removal of external stainless-steel, tamper proof fasteners

Cover must be made of a minimum 0.25-inch-thick, shatter-resistant polycarbonate.

LED character display must:

- 1. Consist of two 7-segment, solid-state, numeric characters, which must:
 - 1.1. Be a minimum 15 inches in height
 - 1.2. Be visible and legible from a minimum distance of 1500 feet and legible from a minimum distance of 750 feet
 - 1.3. Consist of a minimum 16 LEDs, which must:
 - 1.3.1. Be amber and have a wavelength from 590 to 600 nm and rated for minimum 100,000 hours
 - 1.3.2. Must maintain a minimum 85 percent of the initial light output after 48 months of continuous use over the temperature range

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- 3. Remain blank when no vehicles are detected within the radar detection zone
- 4. Have the option to flash the pre-set speed limit when the detected vehicle speed is 5 miles higher than the pre-set speed
- 5. Be viewable only by the approaching traffic

Dimming control must:

- 1. Automatically adjust the character light intensity to provide optimum character visibility and legibility under all ambient lighting conditions
- 2. Have minimum 3 manual dimming modes of different intensities

87-14.02D Radar Units

Radar unit must:

- 1. Be able to detect up to 3 lanes of approaching traffic
- 2. Operate with an internal, low power, 24.159 GHz (K-band)
- 3. Be FCC approved Part 15 certified
- 4. Have a speed accuracy of ±1 mph
- 5 Have a maximum 15 W power consumption

Replace 87-19 with:

10-19-18

87-19 FIBER OPTIC CABLE SYSTEMS

87-19.01 GENERAL 87-19.01A Summary

Section 87-19 includes specifications for constructing fiber optic cable systems.

A fiber optic cable system includes:

- 1. Conduit and accessories
- 2. Vaults
- 3. Warning tape
- 4. Fiber optic cables
- 5. Fiber optic splice enclosures
- 6. Fiber distribution units
- 7. Fiber optic markers
- 8. Fiber optic connectors and couplers

The components of a fiber optic system are shown on the project plans.

87-19.01B Definitions

Reserved

87-19.01C Submittals

At least 15 days before cable installation, submit:

- 1. Manufacturer's procedures for pulling fiber optic cable
- 2. Test reports from a laboratory accredited to International Standards Organization/International Electrotechnical Commission 17025 by the American Association for Laboratory Accreditation (A2LA) or the ANSI-ASQ National Accreditation Board (ANAB) for:
 - 2.1. Water penetration
 - 2.2. Cable temperature cycling
 - 2.3. Cable impact
 - 2.4. Cable tensile loading and fiber strain
 - 2.5. Cable compressive loading
 - 2.6. Compound flow
 - 2.7. Cyclic flexing

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- 3.1. Name of calibration facility
- 3.2. Date of calibration
- 3.3. Type of equipment, model number and serial number
- 3.4. Calibration result

Submit optical time-domain reflectometer data files for each test in a Microsoft Excel format.

After performing the optical time-domain reflectometer test and the power meter and light source test, submit within 4 business days a hard copy and electronic format:

- 1. Cable Verification Worksheet
- 2. Segment Verification Worksheet
- 3. Link Loss Budget Worksheet

The worksheets are available at the Division of Construction website.

87-19.01D Quality Assurance 87-19.01D(1) General

Reserved

87-19.01D(2) Quality Control

Notify the Engineer 4 business days before performing field tests. Include exact location of the system or components to be tested. Do not proceed with the testing until authorized. Perform each test in the presence of the Engineer.

The optical time-domain reflectometer test consists of:

- 1. Inspecting the cable segment for physical damage.
- 2. Measuring the attenuation levels for wavelengths of 1310 and 1550 nm in both directions for each fiber using the optical time-domain reflectometer.
- 3. Comparing the test results with the data sheet provided with the shipment. If there are attenuation deviations greater than 5 percent, the test will be considered unsatisfactory and the cable segment will be rejected. The failure of any single fiber is a cause for rejection of the entire segment. Replace any rejected cable segments and repeat the test.

The power meter and light source test consists of:

- Testing each fiber in a link using a light source at one end of the link and a power meter at the other end
- 2. Measuring and recording the power loss for wavelengths of 1310 and 1550 nm in both directions

Index matching gel is not allowed.

Installation and splicing of the fiber optic cable system must be performed by a certified fiber optic installer.

The optical time-domain reflectometer test and the power meter and light source test must be performed by a certified fiber optic technician.

The certification for the fiber optic installer and fiber optic technician must be from an organization recognized by the International Certification Accreditations Council and must be current throughout the duration of the project.

87-19.02 MATERIALS

87-19.02A General

All metal components of the fiber optic cable system must be corrosion resistant.

All connectors must be factory-installed and tested.

Patch cords, pigtails, and connectors must comply with ANSI/TIA-568.

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A splice cassette may be used in place of a pigtail and a splice tray.

Each cable reel must have a weatherproof label or tag with information specified in ANSI/ICEA S-87-640 including:

- 1. Contractor's name
- 2. Contract number
- 3. Number of fibers
- 4. Cable attenuation loss per fiber at 1310 and 1550 nm

The labeled or tagged information must also be in a shipping record in a weatherproof envelope. The envelope must be removed only by the Engineer.

87-19.02B Vaults

A vault must:

- 1. Comply with section 86-1.02C and AASHTO HS 20-44, and load tested under AASHTO M 306.
- 2. Be a minimum:
 - 2.1. 4 feet wide by 4 feet high by 4 feet long nominal inside dimensions for box type.
 - 2.2. 4 feet high by 4 feet outside diameter for round type.
- 3. Have a minimum access of:
 - 3.1. 30 inches diameter for round type.
 - 3.2. 3 feet wide by 3 feet long for box type.
- 4. Be precast either modular or monolithic.
- 5. Have cable racks installed on the interior sides. A rack must:
 - 5.1. Be fabricated from ASTM A36 steel plate.
 - 5.2. Support a minimum of 100 pounds per rack arm.
 - 5.3. Support a minimum of 4 splice enclosures and a minimum of 4 cables with a minimum slack of 50 feet each.
 - 5.4. Be hot-dip galvanized after manufacturing.
 - 5.5. Be bonded and grounded.
- 6. Have a minimum:
 - 6.1. Two 4-inch diameter knockouts on each side for box type.
 - 6.2. Two 4-inch diameter knockouts placed every 90 degrees for round type.
- 7. Have a minimum 2-inch-diameter drain hole at the center of base.

Entry points for knockouts must not cause the cable to exceed its maximum bend radius.

The access cover must:

- 1. Be a two-piece torsion-assisted sections or a minimum 30-inch-diameter cast iron.
- 2. Have inset lifting pull slots.
- 3. Have markings CALTRANS and FIBER OPTIC.

87-19.02C Fiber Optic Cable

The fiber optic cable must:

- 1. Comply with 7 CFR parts 1755.900, 1755.901, and 1755.902, and ANSI/ICEA S-87-640
- 2. Be a singlemode, zero-dispersion, and have non-gel loose type buffer tubes
- 3. Have no splices
- 4. Have a Type H or Type M outer jacket
- 5. Be shipped on a reel
- 6. Have 10 feet of length on each end of the cable accessible for testing

87-19.02D Fiber Optic Splice Enclosures

A fiber optic splice enclosure must:

- 1. Not exceed 36 inches in length, 8 inches in width, and 8 inches in height
- 2. Be made of thermoplastic material, weather proof, chemical and UV resistant, and re-sealable
- 3. Accommodate a minimum of 8 internal splice trays

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- 5. Have brackets, clips and cable ties
- 6. Have means to anchor the dielectric member of the fiber optic cable
- 7. Include grounding hardware

87-19.02E Fiber Distribution Units

The fiber distribution unit consists of a housing, a patch panel, a 12-multicolor pigtail, and a splice tray.

The fiber distribution unit must be self-contained and pre-assembled.

The housing must:

- 1. Be a 19-inch rack-mountable modular-metal enclosure
- 2. Be a one rack unit
- 3. Have cable clamps to secure buffer tube to the chassis
- 4. Have cable accesses with rubber grommets or similar material to prevent the cable from coming in contact with the bare metal
- 5. Be weatherproof
- 6. Have a hinged top door with a latch or thumbscrew to hold it in the closed position

A patch panel must have a minimum of 12-singlefiber type connector sleeves.

A pigtail must:

- 1. Be a simplex single mode fiber in a 900 µm tight buffer with a 12-inch-outer-diameter PVC jacket
- 2. Have a fiber optic connector attached on one end and bare fiber on the other end
- 3. Be at least 3 feet in length
- 4. Have the manufacturer's part number on the jacket

Pigtails must be single-fiber or ribbon type.

87-19.02F Patch Cords

Patch cords must:

- 1. Be a singlemode fiber in a 900 µm tight buffer with a 0.12-inch-outer-diameter PVC jacket
- 2. Have fiber optic connectors attached on both ends
- 3. Be at least 6 feet in length
- 4. Have manufacturer's part number on the jacket

Duplex patch cords must be of round cable structure, and not have zip-cord structure.

87-19.02G Splice Trays

Splice trays must:

- 1. Have brackets to spool incoming fibers a minimum of 2 turns.
- 2. Have means to secure and protect incoming buffer tubes, pigtails, and a minimum of 12 heat shrink fusion splices.
- 3. Be stackable.
- 4. Have a snap-on or hinged cover. The cover may be transparent.

87-19.02H Fiber Optic Markers

Fiber optic markers must be:

- 1. Type K-2 (CA) object markers for vaults or pull boxes.
- 2. Disk markers for paved areas and transition points from unpaved to paved areas. The disk marker must be metallic, lead free and 4 inches in diameter, and must have a mounting stem at the center of the disk. The mounting stem must be a minimum 3 inches long and a minimum 0.70 inch in diameter.
- 3. Non-reflective Class 1, Type F, flexible post delineators for unpaved areas.

87-19.02l Fiber Optic Connectors and Couplers

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- 1. 0.1-inch ceramic ferrule pre-radiused type
- 2. Capped when not used

Couplers must be made of the same material as the connector's housing and have ceramic sleeves.

Singlemode fiber optic connectors must have a yellow strain relief boot or a yellow base.

87-19.03 CONSTRUCTION

87-19.03A General

Perform the optical time-domain reflectometer test:

- 1. On the fiber optic cable upon its arrival to the job site and before its installation. Complete the Cable Verification Worksheet. Do not install the fiber optic cable until the Engineer's written approval is received.
- 2. After the fiber optic cable segments have been pulled, but before breakout and termination. Complete the Segment Verification Worksheet.
- 3. Once the passive cabling system has been installed and is ready for activation. If the measured individual fusion splice losses exceed -0.30 dB, re-splice and retest. At the conclusion of the optical time-domain reflectometer test, perform the power meter and light source test. If the measured link loss exceeds the calculated link loss, replace the unsatisfactory cable segments or splices and retest. Complete the Link Loss Budget Worksheet.

87-19.03B Vaults Installation

Install a vault as shown and with the side facing the roadway a minimum of 2 feet from the edge of pavement or back of dike, away from traffic.

Install the top of the vault flush with surrounding grade in paved areas and 2 inches above the surrounding grade in unpaved areas.

Place 6 inches of minor concrete around vaults. In unpaved areas, finish top of concrete at a 2 percent slope away from cover. In paved areas, finish top of concrete to match existing slope.

Bolt the steel cover to the vault when not working in it.

87-19.03C Fiber Optic Cable Installation

Install fiber optic cable by a certified installer or a representative from the fiber optic cable manufacturer during installation.

When using mechanical aids to install fiber optic cable:

- 1. Maintain a cable bend radius at least twenty times the outside diameter of the cable
- 2. Use cable grips having a ball bearing swivel
- 3. Use a pulling force on a cable not to exceed 500 pound-foot or manufacturer's recommended pulling tension, whichever is less

When installing the cable using the air blown method, the cable must withstand a static air pressure of 110 psi.

Lubricate the cable using a lubricant recommended by the cable manufacturer.

Install fiber optic cable without splices except where shown.

Provide a minimum of 65 feet of slack for each fiber optic cable at each vault. Divide the slack equally on each side of the splice enclosure.

Install tracer wires in the fiber optic conduits and innerducts as shown. Provide a minimum 5 feet of slack tracer wire in each pull box and vault from each direction. You may splice tracer wire at intervals of not less than 500 feet and only inside vaults or pull boxes.

If a fiber optic cable and tracer wire is installed in an innerduct, pulling a separate fiber optic cable into a spare duct to replace damaged fiber will not be allowed.

Road Safety Improvements at Warjous Locations Apply a non-hydroscopic filling compound to fiber optic cable openings. Contract No. 5415, CIP No. 72195

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Seal the ends of conduit and innerducts after cables are installed.

Install strain relief for fiber optic cable entering a fiber optic enclosure.

Identify fibers and cables by direct labeling, metal tags, or bands fastened in such a way that they will not move. Use mechanical methods for labeling.

Provide identification on each fiber optic cable or each group of fiber optic cables in each vault and at the end of terminated fibers. Fiber optic cable must be identified as shown in the following table:

Cable Identification^a

Sequence	Description	Code	Numbers of
order	Beschption	Oddo	characters
1	Fiber type	S: Singlemode	1
2	Fiber count	###: Example 048	3
3	Begin point	T: TMC H: Hub V: Video Node D: Data Node C: Cable Node TV: Camera CM: CMS E: Traffic Signal RM: Ramp Meter TM: Traffic Monitoring/ Count Station/Vehicle Count Station (VDS, TMS) HA: Highway Advisory Radio EM: Extinguishable Message Sign RW: Roadway Weather Information System WM: Weigh In Motion WS: Weigh-Station Bypass System SV: Vault SC: Splice Cabinet	1 or 2
4	Begin point county abbreviation	AA or AAA: Examples: Orange (ORA), San Mateo (SM)	2 or 3
5	Begin point route number	###: Examples: 005, 082, 114	3
6	Begin point post mile	#####: 02470 (example 024.70): Actual PM value to the 1/100 value	5
7	End Point	In the same way as for Begin Point	1 or 2
8	End point county abbreviation	In the same way as for Begin Point County Abbreviation	2 or 3
9	End point route number	In the same way as Begin Point Route Number	3
10	End point post mile	In the same way as Begin Point Post Mile	5
		T T	

^aCable identification example: The cable code S 048 SV SM 084 02470 SV SC 082 02510 describes a singlemode, 48 strand, cable starting at a fiber optic vault in San Mateo County on Route 84 at post mile 24.70, and ending at another fiber optic vault in Santa Clara County on Route 82 at post mile 25.10.

Place labels on the cables at the following points:

1. Fiber optic vault and pull box entrances and exits Road Safetic Property and Participand Occupantions
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3. Fiber distribution unit entrance

Lace fiber optic cable inside controller cabinets and secure to the cage.

Support the fiber optic cable within 6 inches from a termination and every 2 feet.

Secure fiber optic cables to the cable racks. Store excess cable in a figure 8 fashion.

87-19.03D Fiber Optic Cable Splices

Use fusion splicing for fiber optic cables.

Splice single-buffer tube cable to multi-buffer tube cable using the mid-span access method under manufacturer's instructions. Any mid-span access splice or fiber distribution unit termination must involve only those fibers being spliced as shown.

Place fiber splices in the splice enclosures installed in the vaults.

87-19.03E Splice Enclosures Installation

Maintain an equal amount of slack on each side of the splice enclosure.

Secure the fiber optic splices in splice tray.

Secure the splice trays to the inner enclosure.

Label cables and buffer tubes.

Do not seal fiber splice enclosure until authorized and the power meter and light source test is performed. Seal the enclosure under manufacturer's instructions.

Flash test the outer enclosure under manufacturer's instructions in the presence of the Engineer. Visually inspect the enclosure. If bubbles are present, identify the locations where the bubbles are present, take corrective actions and repeat the flash test until no bubbles are present.

Attach the splice enclosure to the side wall of a vault or hub with a minimum 2 feet distance between the ground and the bottom of the enclosure.

Secure fiber optic cables to the chassis using cable clamps for fiber optic units.

Connect a minimum of one bonding conductor to a grounding electrode after mounting the fiber optic enclosure to the wall. If there are multiple bonding conductors, organize the conductors in a neat way.

87-19.03F Fiber Optic Distribution Unit Installation

Spool incoming buffer tubes 2 feet in the splice tray and expose 1 foot of individual fibers.

Maintain a minimum 2-inch-bend radius during and after installation in the splice tray.

Splice incoming fibers in the splice tray.

Restrain each fiber in the splice tray. Do not apply stress on the fiber when located in its final position.

Secure buffer tubes near the entrance of the splice tray.

Secure splice trays under manufacturer's instructions.

Label splice tray after splicing is completed.

Install patch cords in fiber distribution units and patch panels. Permanently label each cord and each connector in the panel with the system as shown.

87-19.03G Fiber Optic Markers Installation

Install fiber optic markers at 12-inch offset on the side furthest away from the edge of travel way:

1. For fiber optic cable at 500 feet apart in areas where the distance between vaults or pull boxes is greater than 500 feet

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- 3. For fiber optic cable turns at:
 - 3.1. Beginning of the turn
 - 3.2. Middle of the arc
 - 3.3. End of the turn

When a fiber optic cable crosses a roadway or ramp, install a disk marker over the conduit trench on:

- 1. Every shoulder within 6 inches from the edge of pavement
- 2. Delineated median
- 3. Each side of a barrier

Install markers under section 81 except each retroreflective face must be parallel to the road centerline and facing away from traffic.

87-19.04 PAYMENT

Not Used

Replace section 87-20 with:

04-19-19

87-20.01 GENERAL

Section 87-20 includes specifications for providing, maintaining, and removing temporary electrical systems.

Obtain the Department's authorization for the type of temporary electrical system and its installation method.

A temporary system must operate on a continuous, 24-hour basis.

A temporary electrical system must have a primary power source and a back-up power source from:

- 1. Commercial power from a utility company
- 2. Generator system
- 3. Photovoltaic system

87-20.02 MATERIALS

87-20.02A General

Material and equipment may be new or used.

Temporary wood poles must comply with section 48-6.

The components of a temporary system are shown on the project plans.

If you use Type UF-B cable, the minimum conductor size must be no. 12.

A back-up power source must:

- 1. Have an automatic transfer switch
- 2. Start automatically and transfer the system load upon reaching the operating voltage in the event of a power source failure

87-20.02B Temporary Flashing Beacon Systems

A temporary flashing beacon system consists of a flashing beacon system, wood post, and a power source.

The system must comply with the specifications for a flashing beacon system in section 87-7, except it may be mounted on a wood post or a trailer.

87-20.02C Temporary Lighting Systems

A temporary lighting system consists of a lighting system, a power source, and wood poles.
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The system must comply with the specifications for a lighting system in section 87-2, except it may be mounted on a wood pole or a trailer.

87-20.02D Temporary Signal Systems

A temporary signal system consists of a signal and lighting system, wood poles and posts, and a power source.

The system must comply with the specifications for a signal and lighting system in section 87-4, except:

- 1. Signal heads may be mounted on a wood pole, mast arm, tether wire, or a trailer
- 2. Flashing beacons may be mounted on a wood post, or a trailer

87-20.02E Generators

A generator must:

- 1. Be 120 V(ac) or 120/240 V(ac), 60 Hz, 2.5 kW minimum, continuous-duty type
- 2. Be powered by a gasoline, LPG, or diesel engine operating at approximately 1,800 rpm with an automatic oil feed
- 3. Be equipped to provide automatic start-stop operation with a 12 V starting system
- 4. Have generator output circuits that have overcurrent protection with a maximum setting of 15 A
- 5. Have enough fuel storage to operate when it is unattended
- 6. Have a spark arrester complying with Pub Cont Code § 4442

87-20.02F Automatic Transfer Switches

An automatic transfer switch must provide:

- 1. Line voltage monitoring in the event of a power outage that signals the back-up power source to start
- 2. Start delay, adjustable from 0 to 6 seconds, to prevent starting if the power outage is only momentary and a stop delay, adjustable from 0 to 8 minutes, to allow the back-up power source to unload
- 3. Transfer delay from 0 to 120 seconds to allow the back-up power source to stabilize before connecting to the load and retransfer delay from 0 to 32 minutes to allow the line voltage to stabilize
- 4. Mechanical interlock to prevent an application of power to the load from both sources and to prevent backfeeding from the back-up power source to the primary power source

87-20.03 CONSTRUCTION

87-20.03A General

Provide electrical and telecommunication services for temporary systems. Do not use existing services unless authorized.

Provide power for the temporary electrical systems.

Commercial power must be 120 V(ac) or 120/240 V(ac) single phase. Make arrangements with the utility company for providing service. Protect the power source in a locked enclosure. Provide keys to all locks to the Engineer.

Install conductors and cables in a conduit, suspended from wood poles at least 25 feet above the roadway, or use direct burial conductors and cables.

You may saw slots across paved areas for burial conductors and cables.

Install conduit outside the paved area at a minimum of 12 inches below grade for Type 1 and 2 conduit and at a minimum of 18 inches below grade for Type 3 conduit.

Install direct burial conductors and cables outside the paved area at a minimum depth of 24 inches below grade.

Place the portions of the conductors installed on the face of wood poles in either Type 1, 2, or 3 conduit between the point 10 feet above grade at the pole and the pull box. The conduit between the pole and the pull box must be buried at a depth of at least 18 inches below grade.

Place conductors across structures in a Type 1, 2, or 3 conduit. Attach the conduit to the outside face of Roath Safatty Improvements at Various Locations

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Mount the photoelectric unit at the top of the standard or wood post.

You may abandon in place conductors and cables in sawed slots or in conduit installed below the ground surface.

87-20.03B Temporary Flashing Beacon Systems

Protect each flashing beacon with a fused splice connector on the line side. Wherever conductors are run overhead, install the splice connector in the line side outside of the control assembly.

87-20.03C Temporary Lighting Systems

Protect each luminaire with a fused splice connector on the line side. Wherever conductors are run overhead, install the fuse splice connectors in the line side before entering the mast arm.

87-20.03D Temporary Signal Systems

You may splice conductors that run to a terminal compartment or a signal head on a pole to the through conductors of the same phase in a pull box adjacent to the pole. Do not splice conductors or cables except in a pull box or in a NEMA 3R enclosure.

The Department provides the timing for the temporary signal.

Maintain the temporary signal except for the Department-furnished controller assembly.

87-20.04 PAYMENT

Not Used

Replace item 7 in the list in the 2nd paragraph of section 87-21.03B(2) with:

10-19-18

7. Camera system

^^^^^^

DIVISION XI MATERIALS 90 CONCRETE

04-19-19 **Add to section 90-1.01B**:

04-19-19

CIP structural concrete members: Components of bridge structures, piling, retaining walls, sound walls, box culverts, approach slabs, bridge railing, and bridge barriers.

Add to the end of section 90-1.01C(6):

04-19-19

For CIP structural concrete members, submit with your mix design results from the tests specified in 90-1.01D(10)(d) and the results from the tests shown in the following table:

Quality characteristic	Test method
Specific gravity and absorption of coarse aggregate	ASTM C127
Specific gravity and absorption of fine aggregate	ASTM C128
Durability index for fine aggregate	California Test 229
Soundness	California Test 214
Resistance to degradation	ASTM C131
Organic impurities	California Test 213
Chloride concentration of water for washing aggregates and mixing concrete	California Test 422
Sulfate concentration of water for washing aggregates and mixing concrete	California Test 417
Impurities in water for washing aggregates and mixing concrete	ASTM C191 or ASTM C266 and ASTM C109

Add to the end of section 90-1.01C(8):

04-19-19

For CIP structural concrete members, submit test results within 3 business days after completing each QC test. For submittal, go to:

http://dime.dot.ca.gov/

For CIP structural concrete members, include the following with the test results:

- 1. Contract number
- 2. Mix design number
- 3. Test sample identification number
- 4. Date and time of test
- 5. Batch plant
- 6. Batch number
- 7. Bridge number and description of element
- 8. Supporting data and calculations
- 9. Name, certification number, and signature of the QC tester

If additional compressive strength test results are needed for CIP structural concrete members to facilitate your schedule, submit a plot of the strength projection curve.

Add to section 90-1.01C:

04-19-19

90-1.01C(11) Quality Control Plan

Section 90-1.01C(11) applies to CIP structural concrete members.

Submit 3 copies of the QC plan for review.

Submit an amended QC plan or an addendum to the QC plan when there are any changes to:

- 1. Concrete plants
- 2. Testing laboratories
- 3. Plant certification or laboratory accreditation status
- 4. Tester or inspector qualification status
- 5. QC personnel
- 6. Procedures and equipment
- 7. Material sources
- 8. Material testing

Allow the Department 5 business days to review an amended QC plan or an addendum to the QC plan. Road Safety Improvements at Various Locations

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90-1.01C(12) Concrete Materials Quality Control Summary Report

Section 90-1.01C(12) applies to CIP structural concrete members.

During concrete production for CIP structural concrete members, submit a concrete materials QC summary report at least once a month. The report must include:

- 1. Inspection reports.
- 2. Test results.
- Documentation of:
 - 3.1. Test result evaluation by the QC manager.
 - 3.2. Any discovered problems or deficiencies and the corrective actions taken.
 - 3.3. Any testing of repair work performed.
 - 3.4. Any deviations from the specifications or regular practices with explanation.
- 4. Certificate of compliance for the structural concrete material signed by the QC manager. The certificate must state that the information contained in the report is accurate, the minimum testing frequencies specified in section 90-1.01D(10)(d) are met, and the materials comply with the Contract.

Add to section 90-1.01D:

04-19-19

90-1.01D(7) Qualifications

Section 90-1.01D(7) applies to CIP structural concrete members.

QC laboratory testing personnel must have an ACI Concrete Laboratory Testing Technician, Level 1 certification or an ACI Aggregate Testing Technician, Level 2 certification, whichever certification includes the test being performed.

QC field testing personnel and field and plant inspection personnel must have an ACI Concrete Field Testing Technician, Grade I certification.

90-1.01D(8) Certifications

Section 90-1.01D(8) applies to CIP structural concrete members.

Each concrete plant used for CIP structural concrete members must:

- Have a current certification for ready mixed concrete production facilities from the National Ready Mixed Concrete Association. Plant Certification Checklist and supporting documentation must be available upon request.
- 2. Be tested and authorized under the Department's MPQP.

Each QC testing laboratory must be an authorized laboratory with current accreditation from the AASHTO Accreditation Program for the tests performed.

90-1.01D(9) Preconstruction Meeting for CIP Structural Concrete

Section 90-1.01D(9) applies to CIP structural concrete members.

Before concrete placement, hold a meeting to discuss the requirements for structural concrete QC. The meeting attendees must include the Engineer, the QC manager, and at least 1 representative from each concrete plant performing CIP structural concrete activities for the Contract.

90-1.01D(10) Quality Control

90-1.01D(10)(a) General

Section 90-1.01D(10) applies to CIP structural concrete members.

Develop, implement, and maintain a QC program that includes inspection, sampling, and testing of structural concrete materials for CIP structural concrete members.

Perform all sampling, testing, and inspecting required to control the process and to demonstrate compliance with the Contract and the authorized QC plan.

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Provide a QC field inspector at the concrete delivery point while placement activities are in progress.

Provide a testing laboratory and the testing personnel for QC testing.

The QC inspector and the QC manager must be fully authorized by the Contractor to reject material.

QC testers and inspectors must be your employees or must be hired by a subcontractor providing only QC services. QC testers and inspectors must not be employed or compensated by a subcontractor or by other persons or entities hired by subcontractors who will provide other services or materials for the project.

If lightweight concrete, RSC or SCC is used as structural concrete, you must also comply with the sampling and testing specifications of that section.

90-1.01D(10)(b) Quality Control Plan

The QC plan must detail the methods used to ensure the quality of the work and provide the controls to produce concrete. The QC plan must include:

- Names and documentation of certification or accreditation of the concrete plants and testing laboratories to be used
- 2. Names, qualifications, and copies of certifications for the QC manager and all QC testing and inspection personnel to be used
- 3. Organization chart showing QC personnel and their assigned QC responsibilities
- 4. Example forms, including forms for certificates of compliance, hard copy test result submittals, and inspection reports
- 5. Methods and frequencies for performing QC procedures, including inspections and material testing
- 6. Procedures to control quality characteristics, including standard procedures to address properties outside of the specified operating range or limits, and example reports to document nonconformances and corrective actions taken
- 7. Procedures for verifying:
 - 7.1. Materials are properly stored during concrete batching operations
 - 7.2. Batch plants have the ability to maintain the concrete consistency during periods of extreme heat and cold
 - 7.3. Admixture dispensers deliver the correct dosage within the accuracy requirements specified
 - 7.4. Delivery trucks have a valid National Ready Mixed Concrete Association certification card
- 8. Procedures for verifying that the weighmaster certificate for each load of concrete shows:
 - 8.1. Concrete as batched complies with the authorized concrete mix design weights
 - 8.2. Moisture corrections are being accurately applied to the aggregates
 - 8.3. Cementitious materials are from authorized sources
 - 8.4. Any water that is added after batching at the plant
- 9. Procedures for visually inspecting the concrete during discharge operations

Allow the Department 5 business days to review an amended QC plan or an addendum to the QC plan.

90-1.01D(10)(c) Quality Control Manager

Assign a QC manager. The QC manager must have one of the following qualifications:

- 1. Civil engineering license in the State
- 2. ACI Concrete Laboratory Testing Technician, Level 1 certification
- 3. NICET Level II concrete certification
- 4. ICC Reinforced Concrete Special Inspector certification
- 5. ASQ Certified Manager of Quality/Organizational Excellence with the qualifying 10 years of experience and body of knowledge in the field of concrete

During concrete placement, the QC manager must be at the plant or job site within 3 hours of receiving notification from the Engineer.

90-1.01D(10)(d) Quality Control Testing Frequencies

For each mix design used to produce CIP structural concrete, perform sampling and testing in compliance with the following tables:

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Aggregate QC Tests

Quality characteristic	Test method	Minimum testing frequency
Aggregate gradation	California Test 202	Once per each day of pour
Sand equivalent	California Test 217	
Cleanness value	California Test 227	
Moisture content of fine	California Test 226	1–2 times per each day of pour,
aggregate		depending on conditions

Concrete QC Tests

Quality characteristic	Test method	Minimum testing frequency
Slump	ASTM C143/C143M	Once per 100 CY or each day of pour, whichever is more frequent, and when requested by the Engineer
Uniformity ^a	ASTM C143/C143M, California Test 533, and California Test 529	When ordered by the Engineer
Air content, (freeze-thaw area)	California Test 504 ^b	If concrete is air entrained, once per 30 CY or each day of pour, whichever is more frequent
Air content, (non-freeze-thaw area)	California Test 504 ^b	If concrete is air entrained, once per 100 CY or each day of pour, whichever is more frequent
Temperature	California Test 557	Once per 100 CY or each day of pour,
Density	California Test 518	whichever is more frequent
Compressive strength ^{c,d}	California Test 521	

^aAs specified in section 90-1.01D(4)

90-1.01D(10)(e) Inspection Reports

Document each inspection performed by a QC inspector in an inspection report that includes:

- 1. Contract number
- 2. Mix design number
- 3. Date and time of inspection
- 4. Plant location
- 5. Concrete placement location
- 6. Batch number
- 7. Reviewed copies of weighmaster certificates
- 8. Description of the inspection performed
- 9. Name, certification number, and signature of the QC inspector

90-1.01D(10)(f) Rejection of Material

If any of the QC concrete test results fail to comply with the specified requirements, the batch of concrete must not be incorporated in the work. Notify the Engineer. Repeat the QC concrete tests on each subsequent batch until the test results comply with the specified requirements.

If 3 consecutive batches fail to comply with the specified requirements, (1) revise concrete operations as necessary to bring the concrete into compliance and (2) increase the frequency of QC testing. The revisions must be authorized before resuming production. After production resumes, you must receive authorization before returning to the QC testing frequency authorized in the QC plan.

bUse ASTM C173/C173M for lightweight concrete.

^cMark each cylinder with the Contract number, the date and time of sampling, and the weighmaster certificate number.

dYou may need additional test samples to facilitate your schedule.

90-1.01D(11) Department Acceptance

The Department accepts concrete incorporated into CIP structural concrete members based on only the Department's test results. QC test results will not be used for Department acceptance.

Replace the table in section 90-1.02G(6) with:

04-19-19

	Nomir	ıal	Maximum		
	Penetration	Slump	Penetration	Slump	
Type of work	(in)	(in)	(in)	(in)	
Concrete pavement	0–1		1.5		
Nonreinforced concrete members	0–1.5		2		
Reinforced concrete structures with:					
Sections over 12 inches thick	0–1.5	1–3	2.5	5	
Sections 12 inches thick or less	0–2	1–4	3	6	
Concrete placed under water		6–8		9	
CIP concrete piles	2.5-3.5	5–7	4	8	

Replace the introductory clause of the 6th paragraph of section 90-1.02H with:

04-19-19

For pavement, the total cementitious material must be composed of one of the following options, by weight:

Add after the 6th paragraph of section 90-1.02H:

04-19-19

For structures, the total cementitious material must be composed of one of the following options, by weight:

- 1. 25 percent natural pozzolan or fly ash with a CaO content of up to 10 percent and 75 percent portland cement.
- 2. 20 percent natural pozzolan or fly ash with a CaO content of up to 10 percent, 5 percent silica fume, and 75 percent portland cement.
- 3. 12 percent silica fume, metakaolin, or UFFA, and 88 percent portland cement.
- 4. 50 percent GGBFS and 50 percent portland cement.
- 5. 25 to 50 percent fly ash with a CaO content of up to 10 percent, and no natural pozzolan. The remaining portion of the cementitious material must be portland cement or a combination of portland cement and UFFA, metakaolin, GGBFS, or silica fume.

Replace section 90-1.03B(2) with:

04-19-19

90-1.03B(2) Water Method

The water method must consist of keeping the concrete continuously wet by applying water for a curing period of at least 7 days after the concrete is placed.

Keep the concrete surface wet by applying water with an atomizing nozzle that forms a mist until the surface is covered with curing media. Do not allow the water to flow over or wash the concrete surface. At the end of the curing period, remove curing media.

Use any of the following curing media to retain moisture:

- 1. Mats, rugs, or carpets
- 2. Earth or sand blankets
- 3. Sheeting materials complying with the durability and water vapor transmission rate specified in

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Appendix B Caltrans Encroachment Permit

To ensure proper coverage during curing:

- 1. Cover the entire concrete surface with the curing media
- 2. Secure the curing media joints to retain moisture
- 3. Keep the curing media within 3 inches of the concrete at all points along the surface being cured

Monitor concrete surface temperature during curing. Ensure that surface temperature is maintained at 140 degrees F or below. If the surface temperature exceeds 140 degrees F, determine cause and provide alternative curing methods to the Engineer for authorization.

10-19-18

Delete the 2nd paragraph of section 90-3.02A.

Add to section 90-4.01C(1):

04-19-19

Submit your QC test results for the tests performed under section 90-4.01D as an informational submittal. The QC test results must be submitted electronically through the Data Interchange for Materials Engineering website within 3 business days of completion of each QC test and must include the concrete mix design number.

^^^^^

96 GEOSYNTHETICS

10-19-18

Replace the 3rd table in the 3rd paragraph of section 96-1.02R with:

10-19-18

Cushion Fabric

Quality obaractoristic	Toot mothed	Requirement Class 10 Class 12 Class 16 Class 24 Class 32 Class 60					
Quality characteristic	restinethod	Class 10	Class 12	Class 16	Class 24	Class 32	Class 60
Mass per unit area (oz/sq yd)	ASTM D5261	10	12	16	24	32	60
Grab tensile break strength (min, lb)	ASTM D4632	230	300	370	450	500	630
Grab tensile break elongation (min, %)	ASTM D4632				50		
Puncture strength (min, lb)	ASTM D6241	700	800	900	1100	1700	2400
Trapezoidal tear strength (min, lb)	ASTM D4533	95	115	145	200	215	290
UV resistance (min, %)	ASTM D7238				70		

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION **ENCROACHMENT PERMIT** Permit No. TR-0120 (REV 6/2012) 0321-NTK0244 Dist/Co/Rte/PM 03-ED-50 PM 4.975 to ED-50 PM 4.975 In compliance with (Check one): March 25, 2021 February 24, 2021 Your application of ___ Fee Paid Deposit s Exempt s N/A Utility Notice No. Performance Bond Amount (1) Payment Bond Amount (2) s N/A s N/A Agreement No. Bond Company R/W Contract No. Bond Number (2) County of El Dorado TO: c/o County of El Dorado 2441 Headington Road Placerville, CA 95667 Attn: County of El Dorado , PERMITTEE 530-621-5998 and subject to the following, PERMISSION IS HEREBY GRANTED to: Place traffic control signs on State Route 50 near Cambridge Road in Cameron Park while installing HFST on Cambridge Road as per the attached plans received on February 2, 2021. In addition to the General and Special Provisions, the following conditions apply: 1. Notwithstanding General Provision #4, if the work for this permit is to be performed by other than the permittee's forces, your contractor must obtain an encroachment permit (double permit) prior to starting work. The following items are required to be submitted with the contractors double permit application: a) A deposit of \$492.00. b) A set of traffic control plans signed and stamped by a professional engineer. ---Continued on Page 2--THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER The following attachments are also included as part of this permit (Check applicable): In addition to fee, the permittee will be billed actual costs for: X Yes General Provisions Nο Yes Review Yes X No Utility Maintenance Provisions X No Yes X No Special Provisions T-9, T-10, T-14 X No Yes Inspection Yes X No A Cal-OSHA permit, if required: Permit No. _ X Yes Field work X No As-Built Plans Submittal Route Slip for Locally Advertised Projects Yes Yes ▼ No Storm Water Pollution Protection Plan (If any Caltrans effort expended) Yes The information in the environmental documentation has been reviewed and considered prior to X No approval of this permit. This permit is void unless the work is completed before September 1, 2021 This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized. No project work shall be commenced until all other necessary permits and environmental clearances have been obtained Mali Karimi, Permit Inspector AMARJEET BENIPAL, District Director cc: Steve Hardie, Sunrise Maint. Region Hikmat Braibess HIKMAT BSAIBESS, District Permit Engineer

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

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PERMISSIONS Conditions Continued:

2. Permittee must arrange the onsite pre-construction meeting with the Caltrans representative a minimum of ten (10) days prior to the start of work to discuss scope of work, schedule, and Traffic Control Plans (TCP).

- 3. Traffic control must be placed, maintained, and performed by a California C-31 Construction Zone Traffic Control Contractor and be in accordance with the latest edition of CA MUTCD and Caltrans standards.
- 4. Shoulder/Lane closure requests (including "Road Work Ahead" type signs in shoulder) must be submitted to the Caltrans representative via email (with the form filled out) by NOON on the Monday preceding the week of planned work, i.e. if you need a closure for a Friday, you must make that request on the Monday of the preceding week (11 days prior). Requests received after NOON on Monday will not be processed until the following Monday.
- 5. Lane or shoulder closures are not authorized unless approved by Caltrans' Traffic Management Center (TMC). All closures and canceled closures must be called in to TMC dispatch at 916-859-7900 at the beginning and end of each scheduled closure. Failure to do so could result in denial of future closure requests.
- 6. Permittee must keep a log of all closures called in to TMC (10-97 closure up, 10-98 closure down, and 10-22 canceled closure), and the name of the dispatch person at the TMC. A copy of the log must be provided via e-mail to the Caltrans representative at the end of each week, no later than close of business on Friday.
- 7. If the contractor closes the sidewalk, they need to assist with directing pedestrian traffic during their work. Pedestrian access must be provided at all times.

The Caltrans representative's contact information is: Mali Karimi - Cell: (916) 709-1744, Email: mali.karimi@dot.ca.gov

County of El Dorado, State of California Department of Transportation

CONTRACT NO. 5415 / CIP No. 72195

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS

THIS AGREEMENT ("Agreement") approved by the Board of Supervisors this ____st day of _____, in the year of 20_, made and concluded, in duplicate, between the COUNTY OF EL DORADO, a political subdivision of the State of California, by the Community Development Agency, Transportation Division thereof, the party of the first part hereinafter called "County," and [CONTRACTOR], party of the second part hereinafter called "Contractor."

RECITALS:

WHEREAS, County has caused the above-captioned Project to be let to formal bidding process; and

WHEREAS, Contractor has duly submitted a bid response for the captioned Project upon which County has awarded this Contract;

NOW, **THEREFORE**, the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree, each with the other, as follows:

Article 1. THE WORK

The improvement contemplated in the performance of this Contract is an improvement over which the County shall exercise general supervision. The County, therefore, shall have the right to assume full and direct control over this Contract whenever the County, at its sole discretion, shall determine that its responsibility is so required.

Contractor shall complete the Work as specified or indicated under the Bid Schedule(s) of County's Contract Documents entitled:

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS

The Project is located in County of El Dorado (insert location description from NTB). The Work to be done is shown on the Plans, described in the Special Provisions and generally consists of, but is not limited to:

Removal of existing pavement striping and markers; installation of high friction surface treatment, new enhanced wet-night thermoplastic striping, raised pavement markers, and advanced warning signs. Other items or details not mentioned above, that are required by the plans, Standard Plans, Standard Specifications, or these Special Provisions must be performed, constructed or installed.

Article 2. CONTRACT DOCUMENTS

The Contract Documents consist of: the Notice to Bidders; the bid forms which include the accepted Proposal, Bid Price Schedule and Total Bid, Subcontractor List, DBE Information, Equal Employment Opportunity Certification, Section 10285.1 Statement, Section 10162 Questionnaire, Section 10232 Statement, Noncollusion Affidavit, Iran Contracting Act Certification, Debarment, Suspension, Ineligibility, and Voluntary Exclusion Certification, Non-lobbying Certification for Federal-Aid Contracts, Disclosure of Lobbying Activities (Standard Form LLL),Opt Out of Payment Adjustments for Price Index Fluctuation form, if elected, Electronic Files Usage Acknowledgment form, if elected, Form FHWA 1273; the Contract which includes this Agreement with all Exhibits thereto, including the Fair Employment Practices Addendum and the Nondiscrimination Assurances, the Performance Bond, and Payment Bond, the Exhibit 15-G Construction Contract DBE Commitment form, Exhibit 15-H DBE Information Good Faith Efforts form; the drawings listed and identified as the Project Plans; the Special Provisions which incorporate by reference

Road Safety Improvements at Various Locations

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the State of California Department of Transportation (Caltrans) Standard Plans 2018, and Standard Specifications 2018, Revised Standard Specifications, and standard drawings from the Design and Improvement Standards Manual of the County of El Dorado, revised March 8, 1994 including Resolution 199-91 and Resolution 58-94 to adopt changes to the Design and Improvement Standards Manual; all Addenda incorporated in those documents before their execution, and all Contract Change Orders issued in accordance with the Contract Documents which may be delivered or issued after the Effective Date of this Agreement and are not attached hereto; the prevailing Labor Surcharge And Equipment Rental Rates (when required) as determined by the Caltrans to be in effect on the date the Work is accomplished; all the obligations of County and of Contractor which are fully set forth and described therein; and all Contract Documents which are hereby specifically referred to and by such reference made a part hereof. All Contract Documents are intended to cooperate so that any Work called for in one and not mentioned in the other is to be executed the same as if mentioned in all Contract Documents. Contractor agrees to perform all of its promises, covenants, and conditions set forth in the Contract Documents, and to abide by and perform all terms and conditions set forth therein. In case of conflict between this Agreement and any other Contract Document, this Agreement shall take precedence.

Article 3. COVENANTS AND CONTRACT PRICE

County hereby promises and agrees with said Contractor to employ, and does hereby employ, said Contractor to provide the material and to do the Work according to the terms and conditions of the Contract Documents herein contained and referred to, for the prices hereinafter set forth, and hereby contracts to pay the same at the time, in the manner and upon the conditions herein set forth; and the said parties for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of the covenants herein contained. County shall pay Contractor for the completion of the Work in accordance with the Contract Documents in current funds the Contract Prices named in Contractor's Bid and Bid Price Schedule, a copy of which is attached hereto as Exhibit A.

Article 4. COMMENCEMENT AND COMPLETION

The Work to be performed under this Contract shall commence on the date specified in the Notice to Proceed issued by County, and the Work shall be fully completed within the time specified in the Notice to Proceed pursuant to Section 8 of the Special Provisions.

County and Contractor recognize that time is of the essence of the Agreement and that County will suffer financial loss if the Work is not completed within the time specified in the Notice to Bidders annexed hereto, plus any extensions thereof allowed in accordance with Section 8 of the Standard Specifications and Special Provisions. They also recognize the delays, expense, and difficulties involved with proving in a legal proceeding the actual loss suffered by County if the Work is not completed on time. Accordingly, instead of requiring any such proof, County and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay County the sum of \$4,000, as liquidated damages and not as a penalty, for each and every calendar day's delay in finishing the Work in excess of the Contract time prescribed herein.

Article 5. INDEMNITY

To the fullest extent allowed by law, Contractor shall defend, indemnify, and hold County, its (their) officers, directors, and employees, and the State of California (State), its officers, directors, agents (excluding agents who are design professionals), and any Federal government agencies associated with this Contract harmless against and from any and all claims, suits, losses, damages, and liability for damages, including attorney's fees and other costs of defense brought for or on account of injuries to or death of any person, including but not limited to, workers and the public, or on account of injuries to or death of County, State, or Federal government agency employees, or damage to property, or any economic, consequential or special damages which are claimed or which shall in any way arise out of or be connected with Contractor's services, operations or performance hereunder, regardless of the existence or degree of fault or negligence on the part of the County, the State of California, or any Federal government agencies, the Contractor, subcontractors or employees of any of these, except for the active, or sole negligence of the County, the State of California or any Federal government agencies their officers and employees, or where expressly prescribed by statute.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021

The duty to indemnify and hold harmless the County, the State, and any Federal government agencies associated with this Contract specifically includes the duties to defend set forth in Section 2778 of the Civil Code. The insurance obligations of Contractor are separate, independent obligations under the Contract Documents, and the provisions of this defense and indemnity are not intended to modify nor should they be construed as modifying or in any way limiting the insurance obligations set forth in the Contract Documents.

This indemnification will remain in effect until terminated or modified in writing by mutual agreement.

Article 6. VENUE

Any litigation arising out of this Contract shall be brought in El Dorado County and governed by California law.

Article 7. NOTIFICATION OF SURETY COMPANY

The surety company shall familiarize itself with all of the conditions and provisions of this Contract, and shall waive the right of special notification of any change or modifications of this Contract or extension of time, or of decreased or increased work, or of the cancellation of the Contract, or of any other act or acts by County or its authorized agents, under the terms of this Contract; and failure to so notify the aforesaid surety company of changes shall in no way relieve the surety company of its obligation under this Contract.

Article 8. ASSIGNMENT OF ANTITRUST ACTIONS

In entering into a public works Contract or a Subcontract to supply goods, services, or materials pursuant to a public works Contract, the Contractor offers and agrees and will require all of its subcontractors and suppliers to agree to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works Contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to Contractor, without further acknowledgment by the parties.

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Government Code Sections 4550-4554, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under Government Code Sections 4550-4554 if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

Article 9. TERMINATION BY COUNTY FOR CONVENIENCE

County reserves the right to terminate the Contract at any time upon determination by County's representative that termination of the Contract is in the best interest of County. County shall issue Contractor a written notice specifying that the Contract is to be terminated.

Upon receipt of said written notice, Contractor shall stop all Work under the Contract except: (1) Work specifically directed to be completed prior to termination, (2) Work the Inspector deems necessary to secure the project for termination, (3) removal of equipment and plant from the site of the Work, (4) action that is necessary to protect materials from damage, (5) disposal of materials not yet used in the Work as directed by County, and (6) clean-up of the site.

If the Contract is terminated for County's convenience as provided herein, all finished or unfinished Work and materials previously paid for shall, at the option of County, become its property. Contractor shall be

Road Safety Improvements at Various Locations

County of El Dorado

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paid an amount which reflects costs incurred for Work provided to the date of notification of termination. In addition, Contractor shall be paid the reasonable cost, as solely judged by County, and without profit, for all Work performed to secure the project for termination.

Article 10. TERMINATION BY COUNTY FOR CAUSE

If Contractor is adjudged as bankrupt or insolvent, or makes a general assignment for the benefit of its creditors or if a trustee or receiver is appointed for Contractor or for any of its property, or if Contractor files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or on more than one occasion fails to supply sufficient skilled workmen or suitable material or equipment, or on more than one occasion fails to make prompt payments to subcontractors for labor, materials, or equipment, or disregards the authority of the County's representative, or the Engineer, if one is appointed, or violates any of the Contract assurances, nondiscrimination provisions or any other Federal or state requirements as identified in Section 7-1.02 of the Special Provisions, or otherwise violates any provision of the Contract Documents, then County may, without prejudice to any other right or remedy and after giving Contractor and its Surety a minimum of ten (10) days from delivery of a written termination notice, terminate the services of Contractor and take equipment and machinery thereon owned by Contractor and finish the Work by whatever method County may deem expedient. In such case, Contractor shall not be entitled to receive any further payment until the Work is finished.

Without prejudice to other rights or remedies County may have, if Contractor fails to begin delivery of materials and equipment, to commence Work within the time specified, to maintain the rate of delivery of material, to execute the Work in the manner and at such locations as specified, or fails to maintain a Work program which will ensure County's interest, or, if Contractor is not carrying out the intent of the Contract, an Inspector's written notice may be served upon Contractor and the Surety on its faithful performance bond demanding satisfactory compliance with the Contract. If Contractor or its Surety does not comply with such notice within five (5) days after receiving it, or after starting to comply, fails to continue, County may exclude it from the premises and take possession of all material and equipment, and complete the Work by County's own forces, by letting the unfinished Work to another Contractor, or by a combination of such methods.

Where Contractor's services have been so terminated by County, said termination shall not affect any right of County against Contractor then existing or which may thereafter accrue. Any retention or payment of monies by County due Contractor will not release Contractor from compliance with the Contract Documents.

If the unpaid balance of the Contract price exceeds the direct and indirect costs of completing the Work, including compensation for additional professional services, such excess shall be paid to Contractor. If the sums under the Contract are insufficient for completion, Contractor or Surety shall pay to County within five (5) days after the completion, all costs in excess of the Contract price. In any event, the cost of completing the Work shall be charged against Contractor and its Surety and may be deducted from any money due or becoming due from County.

The provisions of this Article shall be in addition to all other rights and remedies available to County under law.

If after notice of termination, it is determined for any reason that Contractor was not in default, the rights and obligations of the parties shall be the same as if the notice of termination had not been issued. The Contract shall be equitably adjusted to compensate for such termination.

Article 11. SUCCESSORS AND ASSIGNS

This Agreement shall bind and inure to the heirs, devisees, assignees, and successors in interest of Contractor and to the successors in interest of County in the same manner as if such parties had been expressly named herein.

Article 12. REPORTING ACCIDENTS

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Contractor shall prepare and submit (within 24 hours of such incidents) reports of accidents at the site and anywhere else the Work is in progress in which bodily injury is sustained or property loss in excess of Five Hundred Dollars (\$500.00) occurs.

Article 13. EMISSIONS REDUCTION

Contractor shall comply with emission reduction regulations mandated by the California Air Resources Board, and sign a certification of knowledge thereof:

CERTIFICATE OF KNOWLEDGE - EMISSIONS REDUCTION REGULATIONS

I am aware of the emissions reduction regulations being mandated by the California Air Resources Board. I will comply with such regulations and require my sub-contractors to comply with such regulations before commencing the performance of the Work and maintain compliance throughout the duration of this Contract, and provide County a Certificate of Reported Compliance for each company with road legal vehicles over 14,000 pound gross vehicle weight.

Signed:	Date	

Article 14. WORKERS' COMPENSATION CERTIFICATION

Contractor shall comply with Labor Code Sections 3700 et seq., requiring it to obtain Workers' Compensation Insurance, and sign a certificate of knowledge thereof.

CERTIFICATE OF KNOWLEDGE - LABOR CODE SECTION 3700

I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of Work of this Contract.

Signed:	Date

Article 15. WARRANTY

Contractor warrants to County that materials and equipment furnished for the Work will be of good quality and new, unless otherwise required or permitted under the Contract Documents, that the Work will be free from defects or flaws and is of the highest quality of workmanship and that the Work will conform with the requirements herein. Work not conforming to these requirements, including substitutions not properly approved and authorized, shall be considered defective.

Article 16. RETAINAGE

The retainage from payment is set forth in Section 9-1.16F(1) of the Special Provisions. Contractor may elect to receive one hundred percent (100%) of payments due as set forth in the Contract Documents, without retention, by depositing securities of equivalent value with County, in accordance with, and as set forth in Section 22300 of the Public Contract Code. Securities eligible for deposit hereunder shall be limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

Article 17. DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

The DBE goal for this Contract is 8%

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195
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Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy, as County deems appropriate. Contractor shall include this assurance in every subcontract entered into as a result of this Agreement.

The Contractor shall carry out applicable requirements of 2 CFR Part 200.321 in the award and administration of this UNITED STATED DEPARTMENT OF TRANSPORTATION (USDOT)-assisted Contract. The applicable requirements of 2 CFR Part 200.321 are as follows:

- (a) Contracting with small and minority firms, women's business enterprise and labor surplus area firms.
 - (1) Contractor will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.
 - (2) Affirmative steps shall include:
 - (i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
 - (iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;
 - (v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
 - (vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (a)(2) (i) through (v) of this section.

Bidder will take all necessary affirmative steps to assure that minority firms, women's business enterprises and labor surplus area firms are used when possible.

Article 18. PREVAILING WAGE REQUIREMENTS

Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, PO Box 420603, San Francisco CA 94142-0603, Telephone (415) 703-4708 or by referring to the website at http://www.dir.ca.gov/ OPRL/PWD. The rates at the time of the bid advertisement date of a project will remain in effect for the life of the project in accordance with the California Code of Regulations, as modified and effective January 27, 1997.

Copies of the general prevailing rate of wages in the county in which the Work is to be done are also on file at the Community Development Agency, Transportation Division's principal office, and are available upon request, and in case of projects involving Federal funds, Federal wage requirements as predetermined by the United States Secretary of Labor have been included in the Contract Documents. Addenda to modify the Federal minimum wage rates, if necessary, will be issued as described in the Project Administration section of this Notice to Bidders.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195
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In accordance with the provisions of Labor Code 1810, eight (8) hours of labor constitutes a legal day's work upon all work done hereunder, and Contractor and any Subcontractor employed under this Contract must conform to and be bound by the provisions of Labor Code Sections 1810 through 1815.

In the case of Federally funded projects, where Federal and State prevailing wage requirements apply, compliance with both is required. This project is funded in whole or part by Federal funds. Comply with Exhibit D of this Agreement and the Copeland Act (18 U.S.C. 874 and 29 CFR Part 3), the Davis-Bacon Act (40 U.S.C. 3141-3147 and 29 CFR Part 5), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 and 29 CFR Part 5).

If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, Contractor and Subcontractors must pay not less than the higher wage rate. The Community Development Agency, Transportation Division will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by Contractor and Subcontractors, Contractor and Subcontractors must pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

Article 19. NONDISCRIMINATION

- In connection with its performance under this Contract, Contractor shall comply with all applicable A. nondiscrimination statutes and regulations during the performance of this Contract including, but not limited to the following: Contractor, its employees, subcontractors and representatives shall not unlawfully discriminate against any employee or applicant for employment because of race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Contractor will take affirmative action to ensure that employees are treated during employment, without regard to their race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees for employment, notices to be provided by State setting forth the provisions of this Fair Employment section. Contractor shall, unless exempt, comply with the applicable provisions of the Fair Employment and Housing Act (Government Code, Sections 12900 et seg.) and applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 10000 et seq.); The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990, set forth in Subchapter 5 of Chapter 5 of Division 4.1 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full; and Title VI of the Civil Rights Act of 1964, as amended. Contractor, its employees, subcontractors and representatives shall give written notice of their obligations under this clause as required by law.
- B. Where applicable, Contractor shall include these nondiscrimination and compliance provisions in any of its subcontracts that affect or are related to the Work performed herein.
- C. The Congress of the United States, the Legislature of the State of California and the Governor of the State of California, each within their respective jurisdictions, have prescribed certain nondiscrimination requirements with respect to Contract and other work financed with public funds. Contractor agrees to comply with the requirements of Exhibit B, marked "Fair Employment Practices Addendum" and the requirements of Exhibit C, marked "Nondiscrimination Assurances," including Appendices A through D to Exhibit C, both of which exhibits and all of the Appendices to Exhibit C are incorporated herein and made by reference a part hereof. Contractor further agrees

Road Safety Improvements at Various Locations
Contract No. 5415. CIP No 72195

County of El Dorado

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that any agreement entered into by Contractor with a third party for the performance of project-related Work shall incorporate Exhibits B and C and Appendices A through D to Exhibit C (with third party's name replacing Contractor) as essential parts of such agreement to be enforced by that third party as verified by Contractor.

D. Contractor's signature executing this Contract shall provide any certifications necessary under the Federal laws and the laws of the State of California, including but not limited to Government Code Section 12990 and Title 2, California Code of Regulations, Section 11102.

Article 20. CONTRACTOR ASSURANCES

By executing this Contract, Contractor certifies that it:

- a. Will abide by all administrative, contractual or legal remedies in instances where Contractor violates or breaches Contract terms, and will comply with sanctions and penalties as the Contract Administrator deems appropriate.
- b. Will comply with the termination for cause and termination for convenience provisions of the Contract including the manner by which such termination may be effected and the basis for settlement afforded by those provisions.
- c. Will comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, further amended by Executive Order 13672 of July 21, 2014and as supplemented in Department of Labor regulations (41 CFR Chapter 60).
- d. Will comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3).
- e. Will comply with the Davis-Bacon Act (40 U.S.C. 3141-3147) as supplemented in Department of Labor regulations (29 CFR part 3).
- f. Will comply with the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708) as supplemented by Department of Labor regulations (29 CFR Part 5).
- g. Will comply with County, State of California and FHWA requirements and regulations pertaining to:
 (a) reporting; (b) patent rights with respect to any discovery or invention which arises or is developed in the course of or under this Contract; and (c) copyrights and rights in data.
- h. Will comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C.7606), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (2 C.F.R. Subtitle B, Chapter XV, Part 1532, Section 1532.10 et seq.).
- i. Will comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. : 94-163, 89 Stat. 871).
- j. Will comply with: (i) Section 504 of the Rehabilitation Act of 1973 (Rehabilitation Act) which prohibits discrimination on the basis of disability in Federally assisted programs; (ii) the Americans with Disabilities Act (ADA) of 1990 which prohibits discrimination on the basis of disability irrespective of funding; and (iii) all applicable regulations and guidelines issued pursuant to both the Rehabilitation Act and the ADA.
- k. Will comply with the Department of Industrial Relations pursuant to Labor Code sections 1725.5 and 1771.1.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021

- I. Will comply with 46 CFR 381.7(b), Use of United States-Flag Vessels (Cargo Preference Act):
 - 1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vehicles.
 - 2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
 - 3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.

Any Subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.

Article 21. BUSINESS LICENSE

The County Business License Ordinance provides that it is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of County of El Dorado without possessing a County business license unless exempt under County Ordinance Code Section 5.08.070. Contractor warrants and represents that it shall comply with all of the requirements of the County Business License Ordinance, where applicable, prior to beginning Work under this Contract and at all times during the term of this Contract.

Article 22. TAXES

Contractor certifies that as of today's date, it is not in default on any unsecured property taxes or other taxes or fees owed by Contractor to County. Contractor agrees that it shall not default on any obligations to County during the term of this Agreement.

Article 23. CONTRACT ADMINISTRATOR

The County Officer or employee with responsibility for administering this Agreement is John Kahling, Deputy Director Engineering, Headington Unit, Community Development Agency, Transportation Division, or successor.

Article 24. AUTHORIZED SIGNATURES

The parties hereto represent that the undersigned individuals executing this Agreement on behalf of their respective parties are fully authorized to do so by law or other appropriate instrument and to bind upon said parties the obligations set forth herein.

Article 25. PARTIAL INVALIDITY

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

Article 26. NO THIRD PARTY BENEFICIARIES

Nothing in this Agreement is intended, nor will be deemed, to confer rights or remedies upon any person or legal entity not a party to this Agreement.

Article 27. COUNTERPARTS
Road Safety Improvements at Various Locations
Contract No. 5415, CIP No 72195
May 11, 2021

This Agreement may be executed in one or more counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

Article 28. ENTIRE AGREEMENT

This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties and they incorporate or supersede all prior written or oral agreements or understandings.



IN WITNESS WHEREOF, the said Community Development Agency, Transportation Division of the County of El Dorado, State of California, has caused this Agreement to be executed by County's Board of Supervisors, on its behalf, and the said Contractor has signed this Agreement the day and year written below.

COUNTY OF EL DORADO

Chair, Board of Supervisors Board Date:	Dated:	_	
Board Date:		_	Chair Poord of Supervisors
Dated:	Board Date:		Attest: James S. Mitrisin
Dated:	Dated:		Clerk of the Board of Supervisors
Dated:	Board Date:		Deputy Clerk
By:		CONTRACT	
By:	Dated:		
NOTE: If Contractor is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation; if Contractor is a co-partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign Contracts on behalf of the co-partnership; and if Contractor is an individual, his/her signature shall be placed above. Contractor executing this document on behalf of a corporation or partnership shall be prepared to demonstrate by resolution, article, or otherwise that it is appropriately authorized to act in these regards. For such corporation or partnership, such authority shall be demonstrated to the satisfaction of County. If signature is by an agent, other than officer of a corporation or a member of a partnership, an appropriate Power of Attorney shall be on file with the County prior to signing this document. Mailing Address: Business Address: Email Address: Fax: Phone: Fax: Phone: Fax:		License No.	Federal Employee Identification Number
be demonstrated to the satisfaction of County. If signature is by an agent, other than officer of a corporation or a member of a partnership, an appropriate Power of Attorney shall be on file with the County prior to signing this document. Mailing Address: Business Address: Email Address: Phone: Fax:	NOTE: If Contractor is a corporation, the with the signature of the officer or office Contractor is a co-partnership, the true na of the partner or partners authorized to signal an individual, his/her signature shall be prepared to prepare the corporation or partnership shall be prepared.	ers authorized to me of the firm sh gn Contracts on laced above. Co ared to demonstr	sign Contracts on behalf of the corporation; if all be set forth above together with the signature behalf of the co-partnership; and if Contractor is ontractor executing this document on behalf of a ate by resolution, article, or otherwise that it is
Business Address:	be demonstrated to the satisfaction of	County. If sign	ature is by an agent, other than officer of a
Email Address:	Mailing Address:		
Phone: Fax:	Business Address:		
	Email Address:		
Road Safety Improvements at Various Locations County of El Dorado	Phone:		Fax:
Outtood No. 5445, OIR No. 70405		cations	County of El Dorado

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Agreement C-11

EXHIBIT A

CONTRACTOR'S BID AND BID PRICE SCHEDULE

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ITEM NO.	III-M CODE		ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
1	70030		LEAD COMPLIANCE PLAN	LS	1		
2	80050		PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1		
3	120090		CONSTRUCTION AREA SIGNS	LS	1		
4	120100		TRAFFIC CONTROL SYSTEM	LS	1		
5	120149A		TEMPORARY PAVEMENT DELINEATION	LS	1		
6	128651A		PORTABLE CHANGEABLE MESSAGE SIGN	LS	1		
7	130100		JOB SITE MANAGEMENT	LS	1		
8	130200		PREPARE WATER POLLUTION CONTROL PROGRAM	LS	1		
9	149001A		PREPARE FUGITIVE DUST PLAN	LS	1		
10	380001A		HIGH-FRICTION SURFACE TREATMENT (HFST)	SQYD	26,730		
11	820840		ROADSIDE SIGN – ONE POST	EA	9		
12	840502A		4" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	37,775		
13	840502B		8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	125		
14	840516		THERMOPLASTIC PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)	SQFT	15		
15	999990		MOBILIZATION	LS	1		
						TOTAL	

(F) Final Pay Quantity(P) Eligible for Partial Payment

(LS) Lump Sum

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EXHIBIT B

FAIR EMPLOYMENT PRACTICES ADDENDUM

- 1. In the performance of this Agreement, Contractor will not discriminate against any employee for employment because of race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Contractor will take affirmative action to ensure that employees are treated during employment, without regard to their race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees for employment, notices to be provided by State setting forth the provisions of this Fair Employment section.
- 2. Contractor and all Subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 1290-0 et seq.), and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900(a-f), set forth in Subchapter 5 of Chapter 5 of Division 4.1 of Title 2 of the California Code of Regulations are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Each of Contractor's contractors and all Subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreements, as appropriate.
- 3. Contractor shall include the nondiscrimination and compliance provisions of this clause in all contracts and subcontracts to perform Work under this Agreement.
- 4. Contractor will permit access to the records of employment, employment advertisements, application forms and other pertinent data and records by County, State, the State Fair Employment and Housing Commission or any other agency of the State of California designated by State, for the purposes of investigation to ascertain compliance with the Fair Employment section of this Agreement.
- 5. Remedies for Willful Violation:
 - (a) County may determine a willful violation of the Fair Employment provision to have occurred upon receipt of a final judgment to that effect from a court in an action to which Contractor was a party, or upon receipt of a written notice from the Fair Employment and Housing Commission that it has investigated and determined that Contractor has violated the Fair Employment Practices Act and had issued an order under Labor Code Section 1426 which has become final or has obtained an injunction under Labor Code Section 1429.
 - (b) For willful violation of this Fair Employment provision, County shall have the right to terminate this Agreement either in whole or in part, and any loss or damage sustained by County in securing the goods or services thereunder shall be borne and paid for by Contractor and by the surety under the performance bond, if any, and County may deduct from any moneys due or thereafter may become due to Contractor, the difference between the price named in the Agreement and the actual cost thereof to County to cure Contractor's breach of this Agreement.

EXHIBIT C

NONDISCRIMINATION ASSURANCES

Contractor hereby agrees that, as a condition to receiving any Federal financial assistance from County or the State, acting for the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d-42 U.S.C. 2000d-4 (hereinafter referred to as the Act), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964" (hereinafter referred to as the Regulations), the Federal-aid Highway Act of 1973, and other pertinent directives, to the end that in accordance with the Act, Regulations, and other pertinent directives, no person in the United States shall, on the grounds of race, color, sex, national origin, religion, age or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which County receives Federal financial assistance from the Federal Department of Transportation. Contractor hereby gives assurance that Contractor will promptly take any measures necessary to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

More specifically, and without limiting the above general assurance, Contractor hereby gives the following specific assurances with respect to its Federal-aid Program:

- 1. That Contractor agrees that each "program" and each "facility" as defined in subsections 21.23 (e) and 21.23 (b) of the Regulations, will be (with regard to a "program") conducted, or will be (with regard to a "facility") operated in compliance with all requirements imposed by, or pursuant to, the Regulations.
- 2. That Contractor shall insert the following notification in all solicitations for bids for work or material subject to the Regulations made in connection with the Federal-aid Program and, in adapted form, in all proposals for negotiated agreements:

Contractor hereby notifies all bidders that it will affirmatively insure that in any agreement entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, national origin, religion, age, or disability in consideration for an award.

- 3. That Contractor shall insert the clauses of Appendix A of this assurance in every agreement subject to the Act and the Regulations.
- 4. That the clauses of Appendix B of this Assurance shall be included as a covenant running with the land, in any deed effecting a transfer of real property, structures, or improvements thereon, or interest therein.
- 5. That where Contractor receives Federal financial assistance to construct a facility, or part of a facility, the Assurance shall extend to the entire facility and facilities operated in connection therewith.
- 6. That where Contractor receives Federal financial assistance in the form, or for the acquisition, of real property or an interest in real property, the Assurance shall extend to rights to space on, over, or under such property.
- 7. That Contractor shall include the appropriate clauses set forth in Appendix C and D of this Assurance, as a covenant running with the land, in any future deeds, leases, permits, licenses, and similar agreements entered into by Contractor with other parties:

Appendix C;

- (a) For the subsequent transfer of real property acquired or improved under the Federal-aid Program; and Appendix D;
- (b) For the construction or use of or access to space on, over, or under real property acquired, or improved under the Federal-aid Program.
- 8. That this assurance obligates Contractor for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of,

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personal property or real property of interest therein, or structures, or improvements thereon, in which case the assurance obligates Contractor or any transferee for the longer of the following periods:

- (a) The period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
- (b) The period during which Contractor retains ownership or possession of the property.
- 9. That Contractor shall provide for such methods of administration for the program as are found by the U.S. Secretary of Transportation, or the official to whom he delegates specific authority, to give reasonable guarantee that Contractor, other recipients, sub-grantees, applicants, sub-applicants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed by, or pursuant to, the Act, the Regulations, this Assurance and the Agreement.
- 10. That Contractor agrees that County, the United States and the State of California have a right to seek judicial enforcement with regard to any matter arising under the Act, the Regulations, and this Assurance.
- 11. Contractor shall not discriminate on the basis of race, religion, age, disability, color, national origin or sex in the award and performance of any State assisted Contract or in the administration of County's DBE Program or the requirements of 49 CFR Part 26. Contractor shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure nondiscrimination in the award and administration of State assisted Contracts. County's DBE Race-Neutral Implementation Agreement is incorporated by reference in this Agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this Agreement. Upon notification to the recipient of its failure to carry out its approved DBE Race-Neutral Implementation Agreement, State may impose sanctions as provided for under 49 CFR Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 USC 1001 and/or the Program Fraud Civil Remedies Act of 1985 (31 USC 3801 et. seq.).

These Assurances are given in consideration of and for the purpose of obtaining any and all Federal grants, loans, agreements, property, discounts or other Federal financial assistance extended after the date hereof to County by State, acting for the U.S. Department of Transportation, and is binding on Contractor, other recipients, subgrantees, applicants, sub-applicants, transferees, successors in interest and other participants in the Federal-aid Highway Program.



APPENDIX A

to

EXHIBIT C

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- 1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, age, sex, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitation for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, national origin, age, sex, or disability.
- 4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - 1. withholding payments to the contractor under the contract until the contractor complies; and/or
 - 2. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B to EXHIBIT C

(NOT USED)



APPENDIX C to EXHIBIT C

(NOT USED)



APPENDIX D

to

EXHIBIT C

(NOT USED)



APPENDIX E

to

EXHIBIT C

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), prohibits discrimination on the basis of sex;
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination of the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

APPENDIX E

to

EXHIBIT D

FHWA FORM 1273

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1.Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3.A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b)and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49

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CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
- "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- **3.Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

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- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that

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- such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide exclusive referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of

this contract or such other remedy as the contracting agency deems appropriate.

- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women:
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

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IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an

additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d.If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor,

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that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall

not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete:
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
 - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for

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inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
 - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not

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subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

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VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project: and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully,

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thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

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- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

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- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.qov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of

Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.



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ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

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APPENDIX E

to

EXHIBIT E

FEDERAL WAGE RATES

"General Decision Number: CA20210007 04/02/2021

Superseded General Decision Number: CA20200007

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alpine, Amador, Butte, Colusa,
El Dorado, Glenn,
Lassen, Marin, Modoc, Napa, Nevada,
Placer, Plumas, Sacramento,
Shasta, Sierra, Siskiyou, Solano,
Sonoma, Sutter, Tehama,
Trinity, Yolo and Yuba Counties in
California.

BUILDING CONSTRUCTION PROJECTS
(excluding Amador County only);

DREDGING CONSTRUCTION PROJECTS (does not include hopper dredge
work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); AND HIGHWAY CONSTRUCTION
PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year

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2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021
1	01/08/2021
2	01/15/2021
3	01/22/2021
4	02/05/2021
5	02/19/2021
6	02/26/2021
7	04/02/2021

ASBE0016-001 01/01/2021

AREA 1: MARIN, NAPA, SAN BENITO, SAN FRANCISCO, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN,

MODOC, NEVADA, PLACER, PLUMAS, (1) Marin & Solano Counties.\$ 43.28 SACRAMENTO, SHASTA, SIERRA, 37.91 (2) Remaining Counties.....\$ 39.68 SISKIYOU, SUTTER, TEHEMA, TRINITY, YOLO, 35.71 & YUBA COUNTIES Rates BRCA0003-001 08/01/2020 Fringes Rates Fringes Asbestos Workers/Insulator (Includes the application of MARBLE FINISHER.....\$ 36.53 all insulating materials, Protective Coverings, 17.08 Coatings, and Finishes to all types of mechanical systems) BRCA0003-004 05/01/2019 Area 1.....\$ 74.16 23.58 AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, Area 2.....\$ 46.81 33.50 EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SUTTER, TEHAMA, YOLO AND YUBA ASBE0016-007 01/01/2021 COUNTIES AREA 1 : ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, COUNTIES SIERRA, SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES Rates Fringes AREA 2: MARIN & NAPA COUNTIES BRICKLAYER AREA 1.....\$ 43.24 Rates 21.63 Fringes AREA 2.....\$ 45.92 26.70 Asbestos Removal worker/hazardous material SPECIALTY PAY: handler (Includes (A) Underground work such as tunnel preparation, wetting, work, sewer work, stripping, removal, manholes, catch basins, sewer pipes scrapping, vacuuming, bagging and telephone conduit shall be paid \$1.25 per hour above and disposing of all insulation materials from the regular rate. Work mechanical systems, whether in direct contact with raw sewage they contain asbestos or not) shall receive \$1.25 per hour in addition to the above. AREA 1.....\$ 30.45 10.60 (B) Operating a saw or grinder shall AREA 2.....\$ 36.53 receive \$1.25 per hour 9.27 above the regular rate. (C) Gunite nozzle person shall receive \$1.25 per hour above BOIL0549-002 10/01/2016 the regular rate. Rates _____ Fringes _____ BRCA0003-008 07/01/2019 BOILERMAKER

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	Rates	Tender/Technician\$ 51.90
Fringes		34.02 Diver standby\$ 58.09
TERRAZZO FINISHER\$	37.58	34.02
17.33 TERRAZZO WORKER/SETTER\$	48 53	Diver Tender\$ 57.09 34.02
26.84		Diver wet\$
		101.42 34.02 Manifold Operator (mixed
BRCA0003-010 04/01/2019		gas)\$ 62.09
	Rates	34.02
Fringes	nates	Manifold Operator (Standby).\$ 57.09 34.02
TILE FINISHER		DEPTH PAY (Surface Diving):
Area 1\$	27.31	050 to 100 ft \$2.00 per foot 101 to 150 ft \$3.00 per foot
Area 2\$ 16.50	27.10	151 to 220 ft \$4.00 per foot
Area 3\$	29.94	221 ftdeeper \$5.00 per foot
16.38	20.06	SATURATION DIVING:
Area 4\$ 15.82	28.06	The standby rate shall apply until saturation starts. The
Tile Layer	45 51	saturation diving rate applies when
Area 1\$ 17.64	45.51	divers are under pressure continuously until work task
Area 2\$	45.15	and decompression are
19.06 Area 3\$	49.90	complete. The diver rate shall be paid for all saturation
19.16		hours.
Area 4\$ 19.08	46.77	DIVING IN ENCLOSURES:
13.00		Where it is necessary for Divers to
AREA 1: Butte, Colusa, El Dora Glenn, Lassen, Modoc,	ado,	enter pipes or tunnels, or other enclosures where there is no
Nevada, Placer, Plumas, Sacrame	ento,	vertical ascent, the
Shasta, Sierra, Sutter,		following premium shall be paid: Distance traveled from
Tehema, Yolo, Yuba AREA 2: Alpine, Amador		entrance 26 feet to 300 feet: \$1.00
AREA 3: Marin, Napa, Solano, Sis	skiyou	per foot. When it is
AREA 4: Sonoma		necessary for a diver to enter any pipe, tunnel or other
		enclosure less than 48"" in height,
BRCA0003-014 08/01/2020		the premium will be \$1.00 per foot.
ERCHOUGS 011 00/01/2020		71.00 pc1 100c.
Fringes	Rates	WORK IN COMBINATION OF CLASSIFICATIONS: Employees working in any combination
MADDIE MACON	E1 20	of classifications
MARBLE MASON\$ 28.47	31.30	within the diving crew (except dive supervisor) in a shift
		are paid in the classification with
CARP0034-001 07/01/2020		the highest rate for that shift.
	Rates	
Fringes	114 000	
Diver		CARP0034-003 07/01/2020
Assistant Tender, ROV		
•		

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:	Rates	Steel Shoring Erector, Saw
Fringes		Filer\$ 52.80
Piledriver\$	51.90	30.82 Journeyman Carpenter\$ 52.65
34.02		30.82 Millwright\$ 52.75
		32.41
CARP0035-001 08/01/2020		
AREA 1: MARIN, NAPA, SOLANO & SOL	NOMA	CARP0035-010 07/01/2020
AREA 3: SACRAMENTO, WESTERN EL DO: (Territory west of an	RADO	AREA 1: Marin, Napa, Solano & Sonoma Counties
including highway 49 and the terri	tory	
inside the city limits	_	AREA 2: Monterey, San Benito and Santa
of Placerville), WESTERN PLACE: (Territory west of and	R	Cruz
including highway 49), & YOLO		AREA 3: Alpine, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc,
AREA 4: ALPINE, BUTTE, COLUSA, EA	STERN	Nevada, Placer, Plumas, Sacramento,
EL DORADO, GLENN,	CED	Shasta, Sierra, Siskiyou,
LASSEN, MODOC, NEVADA, EASTERN PLA PLUMAS, SHASTA, SIERRA,	CER,	Sutter, Tehama, Trinity, Yolo & Yuba counties
SISKIYOU, SUTTER, TEHAMA, TRINITY	, &	
YUBA		
		Rates Fringes
]	Rates	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fringes		Modular Furniture Installer
Drywall Installers/Lathers:		Area 1 Installer\$ 28.76
Area 1\$	52.65	22.53
31.26		Lead Installer\$ 32.21
Area 3\$	47.27	23.03 Master Installer\$ 36.43
Area 4\$	45.92	23.03
31.26		Area 2
Drywall Stocker/Scrapper	06.00	Installer\$ 26.11
Area 1\$	26.33	22.53 Lead Installer\$ 29.08
Area 3\$	23.64	23.03
18.22		Master Installer\$ 32.71
Area 4\$	22.97	23.03 Area 3
		Installer\$ 25.16
		22.53
CARP0035-009 07/01/2020		Lead Installer\$ 27.96
Marin County		Master Installer\$ 31.38 23.03
	Rates	
Fringes		
CARPENTER		CARP0046-001 07/01/2020
Bridge Builder/Highway		El Dorado (West), Placer (West),
Carpenter\$	52.65	Sacramento and Yolo Counties
30.82		Data -
Hardwood Floorlayer, Shingler, Power Saw		Rates Fringes
Operator, Steel Scaffold	&	9
Road Safety Improvements at Various Loc	ations	County of El Dorado

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Agreement C-38

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021	County of El Dorado Agreement C-39
Carpenters Bridge Builder/Highway	
Fringes	Millwright\$ 52.75
Amador County Rates	30.82 Journeyman Carpenter\$ 52.65 30.82
	Filer\$ 52.80
CARP0152-003 07/01/2020	Operator, Steel Scaffold & Steel Shoring Erector, Saw
32.41	Hardwood Floorlayer, Shingler, Power Saw
30.82 Millwright\$ 47.92	Carpenter\$ 52.65 30.82
30.82 Journeyman Carpenter\$ 45.42	Carpenters Bridge Builder/Highway
Steel Shoring Erector, Saw Filer\$ 45.57	Fringes
Shingler, Power Saw Operator, Steel Scaffold &	Rates
30.82 Hardwood Floorlayer,	Napa and Sonoma Counties
Bridge Builder/Highway Carpenter\$ 52.65	CARP0751-001 07/01/2020
Carpenters	32.41
Fringes	Millwright\$ 52.75
Rates	Journeyman Carpenter\$ 52.65
Sierra, Sutter and Yuba Counties	Filer\$ 52.80
Alpine, Colusa, El Dorado (East), Nevada, Placer (East),	Operator, Steel Scaffold & Steel Shoring Erector, Saw
CARP0046-002 07/01/2020	Hardwood Floorlayer, Shingler, Power Saw
	Carpenter\$ 52.65
inside the city limits of Placerville.	Carpenters Bridge Builder/Highway
Highway 49 and territory	
County (West) includes territory West of and including	Rates
includes territory West of and including Highway 49 and El Dorado	Solano County
Footnote: Placer County (West)	CARP0180-001 07/01/2020
Millwright\$ 49.27 32.41	
Journeyman Carpenter\$ 46.77	Millwright\$ 47.92
Filer\$ 46.92 30.82	Journeyman Carpenter\$ 45.42 30.82
Steel Shoring Erector, Saw	30.82
Shingler, Power Saw Operator, Steel Scaffold &	Steel Shoring Erector, Saw Filer\$ 45.57
30.82 Hardwood Floorlayer,	Shingler, Power Saw Operator, Steel Scaffold &
Bridge Builder/Highway Carpenter\$ 52.65	30.82 Hardwood Floorlayer,
Carpenters	Carpenter\$ 52.65

CARP1599-001 07/01/2020

Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama and Trinity Counties

Rates

Rates

Fringes

Carpenters
Bridge Builder/Highway
Carpenter......\$ 52.65
30.82
Hardwood Floorlayer,
Shingler, Power Saw
Operator, Steel Scaffold &
Steel Shoring Erector, Saw
Filer.......\$ 45.57
30.82
Journeyman Carpenter.....\$ 45.42
30.82
Millwright.......\$ 47.92

ELEC0180-001 06/01/2020

NAPA AND SOLANO COUNTIES

Rates
Fringes

CABLE SPLICER.....\$ 58.51

24.74
ELECTRICIAN.....\$ 52.01

24.54

ELEC0180-003 12/01/2020

NAPA AND SOLANO COUNTIES

Fringes

Sound & Communications
Installer......\$ 42.11
22.41
Technician.....\$ 48.43

SCOPE OF WORK INCLUDESSOUND & VOICE TRANSMISSION (Music,
Intercom, Nurse Call,
Telephone); FIRE ALARM SYSTEMS
[excluding fire alarm work
when installed in raceways (including
wire and cable

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building projects or jobs],
TELEVISION & VIDEO SYSTEMS, SECURITY
SYSTEMS, COMMUNICATIONS
SYSTEMS that transmit or receive
information and/or control
systems that are intrinsic to the
above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

ELEC0340-002 02/01/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

Rates

Fringes

Communications System
Sound & Communications
Installer......\$ 29.35
3%+15.35
Sound & Communications
Technician.....\$ 33.75

SCOPE OF WORK

Includes the installation testing,
 service and maintenance,

of the following systems which utilize
 the transmission

and/or transference of voice, sound,
 vision and digital for
 commercial, education, security and
 entertainment purposes
 for the following TV monitoring and
 surveillance,

background-foreground music, intercom
 and telephone

interconnect, inventory control
systems, microwave

transmission, multi-media, multiplex,
nurse call system,

radio page, school intercom and sound,
burglar alarms, and
low voltage master clock systems.

(excluding Ladder-Rack for the purpose
of the above listed
systems). Chases and/or nipples (not
to exceed 10 feet)
may be installed on open wiring
systems. Energy management
systems. SCADA (Supervisory Control

B. FIRE ALARM SYSTEMS
Installation, wire pulling and testing

C. TELEVISION AND VIDEO SYSTEMS
Television monitoring and
surveillance systems, Video security
systems, Video
entertainment systems, Video
educational systems, Microwave
transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter
security systems
Vibration sensor systems Card
access systems Access
control systems Sonar/infrared
monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO
THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and Data Acquisition) PCM (Pulse Code Modulation) Inventory Control Systems Digital Data Systems Broadband and Baseband and Carriers Point of Sale VSAT Data Systems Data Systems Communication Systems RF and Remote Control Systems Fiber Optic

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195
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Data Systems WORK EXCLUDED Raceway

systems are not covered

(excluding Ladder-Rack for the purpose to exceed 10 feet) may be installed on open wiring systems. Energy management systems. SCADA (Supervisory Control and Data Acquisition) when not intrinsic to the above listed systems (in the scope). Fire alarm systems when installed in raceways (including wire and cable pulling) shall be performed at the electrician wage rate, when either of the following two (2) conditions apply: 1. The project involves new or major remodel building trades construction. 2. The conductors for the fire alarm system are installed in

system are installed in conduit.

ELEC0340-003 02/01/2021

ALPINE (West of Sierra Mt. Watershed),
AMADOR, BUTTE, COLUSA,
EL DORADO (West of Sierra Mt.
Watershed), GLENN, LASSEN, NEVADA
(West of Sierra Mt. Watershed), PLACER,
PLUMAS, SACRAMENTO,
SHASTA, SIERRA (West of Sierra Mt.
Watershed), SUTTER, TEHAMA,
TRINITY, YOLO & YUBA COUNTIES

Rates

Fringes

ELECTRICIAN

Remaining area.....\$ 41.56

32.49

Sierra Army Depot, Herlong.\$ 48.83

18.54

Tunnel work.....\$ 41.01

18.54

CABLE SPLICER: Receives 110% of the Electrician basic hourly rate.

ELEC0401-005 07/01/2020

ALPINE (east of the main watershed divide), EL DORADO (east of

the main watershed divide), NEVADA (east of the main	systems that are intrinsic to the above.
watershed), PLACER (east of the main watershed divide) and SIERRA (east of the main watershed divide) COUNTIES:	EXCLUDES- Excludes all other data systems or multiple systems which include control function or power supply; excludes
Rates Fringes	installation of raceway systems, line voltage work,
ELECTRICIAN\$ 41.50 20.17	<pre>industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level</pre>
ZONE RATE:	having building access); excludes energy management
70-90 miles - \$8.00 per hour 91+ miles - \$10.00 per hour	systems.
	ELEC0659-006 01/01/2021
ELEC0551-004 06/01/2020	DEL NORTE, MODOC and SISKIYOU COUNTIES
MARIN AND SONOMA COUNTIES	Rates
Rates Fringes	Fringes
ELECTRICIAN\$ 52.40 3%+23.31	17.74
ELEC0551-005 12/21/2020	ELEC0659-008 02/01/2019
MARIN & SONOMA COUNTIES	DEL NORTE, MODOC & SISKIYOU COUNTIES
Rates	Rates
Sound & Communications Installer\$ 42.11	Line Construction (1) Cable Splicer\$ 59.09 20.22
22.41 Technician\$\ 48.43 22.60	(2) Lineman, Pole Sprayer, Heavy Line Equipment Man\$ 52.76 19.96
SCOPE OF WORK INCLUDES-	(3) Tree Trimmer\$ 31.10 11.32
SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS	<pre>(4) Line Equipment Man\$ 52.76</pre>
[excluding fire alarm work when installed in raceways (including	Jackhammermen\$ 33.80
wire and cable pulling) and when performed on new or major remodel	(6) Groundman\$ 33.24
building projects or jobs], TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS	ELEC1245-004 06/01/2020
SYSTEMS, COMMONICATIONS SYSTEMS that transmit or receive information and/or control	ALL COUNTIES EXCEPT DEL NORTE, MODOC & SISKIYOU

Road Safety Improvements at Various Locations
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Rates	AREA 1:
Fringes	(1) Leverman\$ 49.88
LINE CONSTRUCTION	(2) Dredge Dozer; Heavy
(1) Lineman; Cable splicer\$ 59.14 20.78	duty repairman\$ 44.92
(2) Equipment specialist	(3) Booster Pump
(operates crawler	Operator; Deck
<pre>tractors, commercial motor vehicles, backhoes,</pre>	Engineer; Deck mate; Dredge Tender; Winch
trenchers, cranes (50 tons	Operator\$ 43.80
and below), overhead &	34.35
underground distribution line equipment)\$ 47.24	(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler\$ 40.50
19.59	34.35
(3) Groundman\$ 36.12 19.19	AREA 2: (1) Leverman\$ 51.88
(4) Powderman\$ 51.87	34.35
18.79	(2) Dredge Dozer; Heavy
HOLIDAYS: New Year's Day, M.L. King	duty repairman\$ 46.92
Day, Memorial Day,	(3) Booster Pump
Independence Day, Labor Day, Veterans	Operator; Deck
Day, Thanksgiving Day and day after Thanksgiving, Christmas	Engineer; Deck mate; Dredge Tender; Winch
Day	Operator\$ 45.80
/	34.35 (4) Bargeman; Deckhand;
	Fireman; Leveehand; Oiler\$ 42.50
ELEV0008-001 01/01/2021	34.35
Rates	AREA DESCRIPTIONS
Fringes	100 1 NAMED DUMB COMBA COM
ELEVATOR MECHANIC\$ 72.10	AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED,
35.825+a+b	NAPA, SACRAMENTO, SAN BENITO, SAN
FOOTNOTE:	FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ,
a. PAID VACATION: Employer	SOLANO, STANISLAUS,
contributes 8% of regular hourly	SUTTER, YOLO, AND YUBA COUNTIES
<pre>rate as vacation pay credit for employees with more than 5</pre>	AREA 2: MODOC COUNTY
years of service, and 6% for 6 months	
to 5 years of service. b. PAID HOLIDAYS: New Year's Day,	THE REMAINGING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2
Memorial Day, Independence	AS NOTED BELOW:
Day, Labor Day, Veterans' Day,	
Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.	ALPINE COUNTY: Area 1: Northernmost part
	Area 2: Remainder
	CALAVERAS COUNTY:
ENGI0003-008 07/20/2020	Area 1: Remainder
2	Area 2: Eastern part
Rates Fringes	COLUSA COUNTY:
•	Area 1: Eastern part
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING;	Area 2: Remainder
HYDRAULIC SUCTION DREDGING:)	ELDORADO COUNTY:
Road Safety Improvements at Various Locations	County of El Dorado
Contract No. 5415, CIP No 72195	Agreement
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Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY:
Area 1: Remainder
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

LASSEN COUNTY:
Area 1: Western part along the
Southern portion of border
with Shasta County
Area 2: Remainder

MADERA COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

MARIPOSA COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

MONTERREY COUNTY
Area 1: Except Southwestern part
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: Al but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195
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Area 1: All but the Western border
with Mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the
Northeastern border with
Shasta County
Area 2: Remainder

TUOLUMNE COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

ENGI0003-019 06/29/2020

SEE AREA DESCRIPTIONS BELOW

Rates

Fringes

OPERATOR: Power Equipment
(LANDSCAPE WORK ONLY)
GROUP 1

AREA 1......\$ 39.95
30.28
AREA 2.....\$ 41.95
30.28
GROUP 2

AREA 1.....\$ 36.35
30.28
AREA 2.....\$ 38.35
30.28
GROUP 3

AREA 1....\$ 31.74
30.28

AREA 2....\$ 33.74

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade
Operator: All finish grade
work regardless of equipment used, and
all equipment with a
rating more than 65 HP.

GROUP 2: Landscape Operator up to 65
HP: All equipment with
a manufacturer's rating of 65 HP or
less except equipment
covered by Group 1 or Group 3. The
following equipment
shall be included except when used for
finish work as long
as manufacturer's rating is 65 HP or
less: A-Frame and

Winch Truck, Backhoe, Forklift,
Hydragraphic Seeder
Machine, Roller, Rubber-Tired and
Track Earthmoving
Equipment, Skiploader, Straw Blowers,
and Trencher 31 HP up
to 65 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA,
KINGS, MARIN, MERCED,
NAPA, SACRAMENTO, SAN BENITO, SAN
FRANCISCO, SAN JOAQUIN,
SAN MATEO, SANTA CLARA, SANTA CRUZ,
SOLANO, STANISLAUS,
SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY: Area 1: Northernmost part Area 2: Remainder

CALAVERAS COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

COLUSA COUNTY:
Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:
Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:
Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:
Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021 LAKE COUNTY:
Area 1: Southern part
Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County Area 2: Remainder

MADERA COUNTY
Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY Area 1: Remainder Area 2: Eastern part

MENDOCINO COUNTY:
Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY
Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY: Area 1: Central part Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Reaminder

TEHAMA COUNTY:
Area 1: All but the Western border
with mendocino & Trinity

Counties		Oiler\$ 43.79
Area 2: Remainder		31.15 Truck crane oiler\$ 46.08
TRINITY COUNTY: Area 1: East Central part and	the	31.15 GROUP 2
Northeaster border with Shasta County		Cranes\$ 50.54 31.15
Area 2: Remainder		Oiler\$ 42.83 31.15
TULARE COUNTY; Area 1: Remainder Area 2: Eastern part		Truck crane oiler\$ 45.07 31.15 GROUP 3
TUOLUMNE COUNTY:		Cranes\$ 48.80 31.15
Area 1: Remainder Area 2: Eastern Part		Hydraulic\$ 44.44 31.15
		Oiler\$ 42.55 31.15
ENGI0003-038 06/29/2020		Truck crane oiler\$ 44.83 31.15 GROUP 4
""AREA 1"" WAGE RATES ARE LISTED H	BELOW	Cranes\$ 45.76
""AREA 2"" RECEIVES AN ADDITIONAL PER HOUR ABOVE AREA 1 RATES.	\$2.00	OPERATOR: Power Equipment (Piledriving - AREA 1:) GROUP 1
SEE AREA DEFINITIONS BELOW		Lifting devices \$ 52.64
022 12121 221 11121 2010 22201		Oiler\$ 43.38
Fringes	Rates	Truck Crane Oiler\$ 45.66
		GROUP 2 Lifting devices\$ 50.82
OPERATOR: Power Equipment (AREA 1:)	F1 40	31.15
GROUP 1\$ 31.15		Oiler\$ 43.11 31.15
GROUP 2\$ 31.15		Truck Crane Oiler\$ 45.41 31.15
GROUP 3\$ 31.15		GROUP 3 Lifting devices\$ 49.14
GROUP 4\$ 31.15		31.15 Oiler\$ 42.89
GROUP 5\$ 31.15	45.76	31.15 Truck Crane Oiler\$ 45.12
GROUP 6\$ 31.15		31.15 GROUP 4
GROUP 7\$	43.30	Lifting devices\$ 47.37
GROUP 8\$	42.16	GROUP 5 Lifting devices\$ 44.73
GROUP 8-A\$	39.95	31.15 GROUP 6
OPERATOR: Power Equipment (Cranes and Attachments - AREA 1:)		Lifting devices\$ 42.50 31.15 OPERATOR: Power Equipment
GROUP 1	F2 20	(Steel Erection - AREA 1:)
Cranes\$ 31.15	52.30	GROUP 1 Cranes\$ 53.27 31.15
Pood Safety Improvements at Various Lee	ations	County of El Dorado

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195
May 11, 2021

-1.0	
Oiler\$ 43.72 31.15	DOMED COLLEGE OF DAMOD
Truck Crane Oiler\$ 45.95	POWER EQUIPMENT OPERATOR CLASSIFICATIONS
31.15	CLASSIFICATIONS
GROUP 2	GROUP 1: Operator of helicopter (when
Cranes\$ 51.50	used in erection work);
31.15	Hydraulic excavator, 7 cu. yds. and
Oiler\$ 43.45	over; Power shovels,
31.15	over 7 cu. yds.
Truck Crane Oiler\$ 45.73	
31.15	GROUP 2: Highline cableway; Hydraulic
GROUP 3	excavator, 3-1/2 cu.
Cranes\$ 50.02	yds. up to 7 cu. yds.; Licensed
31.15	construction work boat
Hydraulic\$ 45.07 31.15	operator, on site; Power blade operator (finish); Power
0iler\$ 43.23	shovels, over 1 cu. yd. up to and
31.15	including 7 cu. yds.
Truck Crane Oiler\$ 45.46	m.r.c.
31.15	
GROUP 4	GROUP 3: Asphalt milling machine;
Cranes\$ 48.00	Cable backhoe; Combination
31.15	backhoe and loader over 3/4 cu. yds.;
GROUP 5	Continuous flight tie
Cranes\$ 46.70	back machine assistant to engineer or
31.15	mechanic; Crane
OPERATOR: Power Equipment	mounted continuous flight tie back
(Tunnel and Underground Work	<pre>machine, tonnage to apply; Crane mounted drill attachment,</pre>
- AREA 1:) SHAFTS, STOPES, RAISES:	tonnage to apply;
GROUP 1\$ 47.52	Dozer, slope brd; Gradall; Hydraulic
31.15	excavator, up to 3 1/2
GROUP 1-A\$ 49.99	cu. yds.; Loader 4 cu. yds. and over;
31.15	Long reach excavator;
GROUP 2\$ 46.26	Multiple engine scraper (when used as
31.15	push pull); Power
GROUP 3\$ 44.93	shovels, up to and including 1 cu.
31.15 GROUP 4\$ 43.79	yd.; Pre-stress wire
31.15 GROUP 4 \$ 43.79	wrapping machine; Side boom cat, 572
GROUP 5\$ 42.65	or larger; Track loader 4 cu. yds. and over; Wheel
31.15	excavator (up to and
UNDERGROUND:	including 750 cu. yds. per hour)
GROUP 1\$ 47.42	, , , , , , , , , , , , , , , , , , ,
31.15	GROUP 4: Asphalt plant engineer/box
GROUP 1-A\$ 49.89	person; Chicago boom;
31.15	Combination backhoe and loader up to
GROUP 2\$ 46.16	and including 3/4 cu.
31.15	yd.; Concrete batch plant (wet or
GROUP 3\$ 44.83 31.15	<pre>dry); Dozer and/or push cat; Pull- type elevating loader;</pre>
GROUP 4\$ 43.69	Gradesetter, grade
31.15	checker (GPS, mechanical or
GROUP 5\$ 42.55	otherwise); Grooving and
31.15	grinding machine; Heading shield
	operator; Heavy-duty
FOOTNOTE: Work suspended by ropes or	drilling equipment, Hughes, LDH,
cables, or work on a	Watson 3000 or similar;
Yo-Yo Cat: \$.60 per hour additional.	Heavy-duty repairperson and/or welder;
	Lime spreader;

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Loader under 4 cu. yds.; Lubrication and service engineer GROUP 6: Armor-Coater (or similar); (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator, asphalt; Rubber-tired scraper, selfloading (paddle-wheels, etc.); Rubber- tired earthmoving equipment (scrapers); Slip form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed constuction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment) GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt); Mine or shaft hoist; Portable crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging

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capacity over 5 ft.

similar

depth; Vermeer T-600B rock cutter or

Ballast jack tamper; Boom- type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self- propelled pipeline wrapping machine; Tractor; Self-loading chipper; Concrete barrier moving machine GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson; Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and supported); Post driver; Roller (except asphalt); Chip

Seal; Self-propelled automatically applied concrete curing airports and canals); Self-propelled compactor (without dozer); Signalperson; concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor

(shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator;

Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (selfpropelled floating); Ross Carrier (construction site);

Rotomist operator; Self-propelled tape machine; Shuttlecar;

Self-propelled power sweeper operator (includes vacuum

sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist,

single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoetrencher); Tub grinder wood chipper

ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Selfpropelled boom-type

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lifting device, over 100 tons

mahcine (on streets, highways, GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and Slip-form pumps (lifting device for including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

> GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Selfpropelled boom-type lifting device 45 tons and under;

GROUP 4: Boom Truck or dual purpose Aframe truck, non-rotating over 15 tons; Truckmounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons; Truckmounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) - under 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Selfpropelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Selfpropelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler,

under

GROUP 4: Assistant operator in lieu of GROUP 4: Combination slurry mixer assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

_____ _____

STEEL ERECTORS

propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

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land or barge mounted 45 tons and GROUP 3: Drill doctor; Mine or shaft hoist

> cleaner; Grouting Machine operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and compressor (qunite); Compressor operator; Oiler; Pump operator; Slusher operator

AREA DESCRIPTIONS:

GROUP 1: Crane over 100 tons; Derrick POWER EQUIPMENT OPERATORS, CRANES AND over 100 tons; Self- ATTACHMENTS, TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

> AREA 1: DEL NORTE, HUMBOLDT, LAKE, MENDOCINO AREA 2 -NOTED BELOW

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

DEL NORTE COUNTY: Area 1: Extreme Southwest corner Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts

Area 2: Remainder

LAKE COUNTY: Area 1: Southern part Area 2: Remainder

MENDOCINO COUNTY:

Area 1: Central and Southeastern Parts Area 2: Remainder

IRON0433-006 07/01/2020

Rates

Fringes

IRONWORKER

Fence Erector.....\$ 34.58 24.81 Ornamental, Reinforcing

and Structural\$ 41.00 33.45	Remaining Counties\$ 32.07 25.30
PREMIUM PAY:	
\$6.00 additional per hour at the following locations:	AREA ""A"" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN
China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB	MATEO AND SANTA CLARA COUNTIES AREA ""B"" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SANCREMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SIERRA, SHASTA, SISKIYOU, SOLANO, SONOMA,
\$4.00 additional per hour at the following locations:	STANISLAUS, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YOUBA COUNTIES
Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center \$2.00 additional per hour at the following locations: Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock LABO0067-001 06/29/2020 AREA ""A"" - MARIN COUNTY AREA ""B"" - ALPINE, AMADOR, BÜTTE COLUSA EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES	Rates Fringes LABORER (TRAFFIC CONTROL/LANE CLOSURE) Escort Driver, Flag Person Area A\$ 29.54 22.17 Area B\$ 28.54 22.17 Traffic Control Person I Area A\$ 29.84 22.17 Area B\$ 28.84 22.17 Traffic Control Person II Area A\$ 27.34 22.17 Traffic Control Person II Area A\$ 27.34 22.17 Traffic Control Person II Area A\$ 26.34 22.17 TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.
Rates Fringes Asbestos Removal Laborer\$ 25.05 12.00 LABORER (Lead Removal) Marin County\$ 33.07	TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.
25.30	LABO0185-002 07/01/2020
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ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

Rates

Fringes

LABORER

Mason Tender-Brick.....\$ 32.84 23.71

LABO0185-005 06/25/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

Rates

Fringes

Tunnel and Shaft Laborers: GROUP 1.....\$ 37.82 24.11 GROUP 2.....\$ 37.59 24.11 GROUP 3....\$ 37.34 24.11 GROUP 4.....\$ 36.89 24.11 GROUP 5.....\$ 36.35 24.11 Shotcrete Specialist.....\$ 38.34

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman;

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Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang muckers, trackmen; Concrete crew includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

...... _____

LABO0185-006 06/25/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHIASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, YUBA COUNTIES

Rates

Fringes

LABORER (CONSTRUCTION CRAFT LABORERS - AREA B:) Construction Specialist Group.....\$ 30.49 23.20 GROUP 1.....\$ 29.79 23.20 GROUP 1-a....\$ 30.01 23.20 GROUP 1-c....\$ 30.01 23.20 GROUP 1-e....\$ 30.34 23.20 GROUP 1-f.....\$ 30.37 23.20 GROUP 2.....\$ 29.64 23.20 GROUP 3.....\$ 29.54 23.20

GROUP 4\$ 23.20	23.23
See groups 1-b and 1-d under lak	orer
LABORER (GARDENERS,	
HORTICULTURAL & LANDSCAPE	
LABORERS - AREA B:)	00 54
(1) New Construction\$	29.54
23.20	
(2) Establishment Warrant	
Period\$	23.23
23.20	
LABORER (GUNITE - AREA B:)	
GROUP 1\$	29.75
22.31	
GROUP 2\$	29 25
22.31	23.20
GROUP 3\$	20 66
	20.00
22.31	00 54
GROUP 4\$	28.54
22.31	
LABORER (WRECKING - AREA B:)	
GROUP 1\$	29.79
23.20	
GROUP 2\$	29.64
23 20	

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive \$0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker;
Chainsaw; Laser beam in connection with laborers' work;
Cast-in- place manhole form setter;
Pressure pipelayer;
Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller;
Multiple unit drill;
Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander,

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pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and bucker; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2"" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precastmanhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work;

Vibrator; Hazardous waste worker (lead removal); Asbestos
and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above
Group 1 wage rates. ""Sewer cleaner"" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts

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thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.)

In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, handheld, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of	Rates Fringes
<pre>debris, grounds and building including but not limited to: street cleaner; cleaning and</pre>	Plasterer tender\$ 32.02 23.00
<pre>washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification ""material</pre>	Work on a swing stage scaffold: \$1.00 per hour additional.
cleaner"" is to be utilized under the	
following conditions: A: at demolition site for the salvage of	LABO0261-002 06/25/2018
the material.	MARIN COUNTY
B: at the conclusion of a job where the material is to be	Rates
salvaged and stocked to be reused on	Fringes
<pre>another job. C: for the cleaning of salvage</pre>	LABORER (TRAFFIC CONTROL/LANE
<pre>material at the jobsite or temporary jobsite yard.</pre>	CLOSURE) Escort Driver, Flag Person\$ 30.54
	23.65
The material cleaner classification should not be used in	Traffic Control Person I\$ 30.84
the performance of ""form stripping,	Traffic Control Person II\$ 28.34
cleaning and oiling and moving to the next point of	23.65
erection"".	TRAFFIC CONTROL PERSON I: Layout of traffic control, crash
	cushions, construction area and
	roadside signage.
GUNITE LABORER CLASSIFICATIONS	TRAFFIC CONTROL PERSON II: Installation and removal of
GROUP 1: Structural Nozzleman	temporary/permanent signs, markers,
GROUP 2: Nozzleman, Gunman, Potman,	delineators and crash cushions.
Groundman	
GROUP 3: Reboundman	
GROUP 4: Gunite laborer	LABO0261-004 06/25/2018
	MARIN COUNTY
	Rates
WRECKING WORK LABORER CLASSIFICATIONS	Fringes
	Tunnel and Shaft Laborers:
GROUP 1: Skilled wrecker (removing and salvaging of sash,	GROUP 1\$ 37.82 24.11
windows and materials)	GROUP 2\$ 37.59
GROUP 2: Semi-skilled wrecker	GROUP 3\$ 37.34
<pre>(salvaging of other building</pre>	24.11 GROUP 4\$ 36.89
	24.11 GROUP 5\$ 36.35
	24.11
LABO0185-008 07/01/2018	Shotcrete Specialist\$ 38.34 24.11

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LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker;
Chainsaw; Laser beam in connection with laborers' work;
Cast-in- place manhole form setter;
Pressure pipelayer;
Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller;
Multiple unit drill;

Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement;

Compactors of all types; Concrete and

magnesite mixer, 1/2
yd. and under; Concrete pan work;
Concrete sander; Concrete
saw; Cribber and/or shoring; Cut
granite curb setter;

Dri-pak-it machine; Faller, logloader and bucker; Form

raiser, slip forms; Green cutter; Headerboard, Hubsetter,

aligner, by any method; High pressure blow pipe (1-1/2"" or

over, 100 lbs. pressure/over); Hydro seeder and similar

type; Jackhammer operator; Jacking of pipe over 12 inches;

Jackson and similar type compactor; Kettle tender, pot and

worker applying asphalt, lay-kold, creosote, lime, caustic

and similar type materials (applying means applying,

dipping or handling of such
materials); Lagging, sheeting,
whaling, bracing, trenchjacking,
lagging hammer; Magnesite,
epoxyresin, fiberglass, mastic worker
(wet or dry); No

joint pipe and stripping of same, including repair of

voids; Pavement breaker and spader, including tool grinder;

Perma curb; Pipelayer (including grade checking in

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connection with pipelaying); Precastmanhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above
Group 1 wage rates. ""Sewer cleaner"" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers'

similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, handheld, pneumatic

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work; Synthetic thermoplastics and tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

> GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification ""material cleaner"" is to be utilized under the following conditions: A: at demolition site for the salvage of the material. B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job. C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of ""form stripping, cleaning and oiling and moving to the next point of erection"".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

LABO0324-008 06/25/2018 GROUP 3: Reboundman NAPA, SOLANO, AND SONOMA COUNTIES GROUP 4: Gunite laborer Rates Fringes WRECKING WORK LABORER CLASSIFICATIONS Tunnel and Shaft Laborers: GROUP 1.....\$ 37.82 24.11 GROUP 1: Skilled wrecker (removing and salvaging of sash, GROUP 2.....\$ 37.59 24.11 windows and materials) GROUP 3.....\$ 37.34 GROUP 2: Semi-skilled wrecker 24.11 GROUP 4.....\$ 36.89 (salvaging of other building 24.11 materials) GROUP 5....\$ 36.35 24.11 Shotcrete Specialist.....\$ 38.34 LABO0261-015 07/01/2018 24.11 TUNNEL AND SHAFT CLASSIFICATIONS Rates Fringes GROUP 1: Diamond driller; Groundmen; Plasterer tender.....\$ 32.02 Gunite and shotcrete nozzlemen 23.00 Work on a swing stage scaffold: \$1.00 GROUP 2: Rodmen; Shaft work & raise per hour additional. (below actual or excavated ground level) LABO0324-004 06/25/2018 GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; NAPA, SOLANO, AND SONOMA, COUNTIES Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Fringes Gunite & shotcrete gunman & potman; Headermen; High LABORER (TRAFFIC CONTROL/LANE pressure nozzleman; Miner - tunnel, CLOSURE) Escort Driver, Flag Person..\$ 29.54 including top and bottom man on shaft and raise work; 23.65 Traffic Control Person I...\$ 29.84 Nipper; Nozzleman on slick line; Sandblaster - potman, 23.65 Traffic Control Person II...\$ 27.34 Robotic Shotcrete Placer, 23.65 Segment Erector, Tunnel Muck Hauler, Steel Form raiser and TRAFFIC CONTROL PERSON I: Layout of setter; Timberman, retimberman (wood traffic control, crash or steel or substitute cushions, construction area and materials therefore); Tugger (for roadside signage. tunnel laborer work); Cable tender; Chuck tender; Powderman TRAFFIC CONTROL PERSON II: - primer house Installation and removal of GROUP 4: Vibrator operator, pavement temporary/permanent signs, markers, delineators and crash breaker; Bull gang muckers, trackmen; Concrete crew cushions. includes rodding and

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spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundma Swamper/ Brakeman	an;	GROUP 3\$ 28.66 22.31 GROUP 4\$ 28.54
LABO0324-010 07/01/2018		LABORER (WRECKING - AREA B:) GROUP 1\$ 29.79
LABOU324-010 07/01/2018		23.20
SOLANO AND SONOMA COUNTIES		GROUP 2\$ 29.64 23.20
	Rates	TOO THOUT O
Fringes		FOOTNOTES: Laborers working off or with or from
LABORER Mason Tender-Brick\$	31 45	bos'n chairs, swinging scaffolds, belts shall receive \$0.25
22.20		per hour above the
		applicable wage rate. This shall not apply to workers
LABO0324-013 06/25/2018		entitled to receive the wage rate set forth in Group 1-a
NAPA, SOLANO, AND SONOMA COUNTI	ES	below.
	Rates	
Fringes		
LABORER (CONSTRUCTION CRAFT		TADODED CLASSIEICAMIONS
LABORERS - AREA B:) Construction Specialist		LABORER CLASSIFICATIONS
Group\$ 23.20	30.49	CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker;
GROUP 1\$	29.79	Chainsaw; Laser beam in connection with laborers' work;
GROUP 1-a\$	30.01	Cast-in- place manhole form setter;
GROUP 1-c\$	29.84	Pressure pipelayer; Davis trencher - 300 or similar type (and all small
GROUP 1-e\$	30.34	trenchers); Blaster; Diamond driller; Multiple unit drill;
GROUP 1-f\$ 23.20	29.37	Hydraulic drill
GROUP 2\$	29.64	GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker
GROUP 3\$	29.54	and similar type tampers; Buggymobile; Caulker, bander,
GROUP 4\$	23.23	<pre>pipewrapper, conduit layer, plastic pipelayer; Certified</pre>
See groups 1-b and 1-d under lak	oorer	hazardous waste worker including Leade
classifications. LABORER (GARDENERS,		Abatement; Compactors of all types; Concrete and
HORTICULTURAL & LANDSCAPE		magnesite mixer, 1/2
LABORERS - AREA B:) (1) New Construction\$	29 54	<pre>yd. and under; Concrete pan work; Concrete sander; Concrete</pre>
23.20	29.34	saw; Cribber and/or shoring; Cut
(2) Establishment Warrant		granite curb setter;
Period\$ 23.20	23.23	Dri-pak-it machine; Faller, logloader and bucker; Form
LABORER (GUNITE - AREA B:)		raiser, slip forms; Green cutter;
GROUP 1\$ 22.31	29.75	Headerboard, Hubsetter, aligner, by any method; High pressure
GROUP 2\$	29.25	blow pipe (1-1/2"" or
22.31		

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over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of such loading and placing; High scalers pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precastmanhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track

driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and

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explosives of whatever type regardless of method used for (including drilling of same); Tree topper; Bit grinder

> GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above Group 1 wage rates. ""Sewer cleaner"" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, handheld, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting;
 Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification ""material cleaner"" is to be utilized under the following conditions: A: at demolition site for the salvage of the material. B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021

another job.

C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of ""form stripping, cleaning and oiling and moving to the next point of erection"".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Gunite laborer

WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

> GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

LABO0324-019 07/01/2018

Rates

Fringes

Plasterer tender.....\$ 32.02 23.00

Work on a swing stage scaffold: \$1.00 per hour additional.

* PAIN0016-004 01/01/2021

MARIN, NAPA, SOLANO & SONOMA COUNTIES

Rates

Fringes

Painters:\$ 45.22 25.48 PREMIUMS: EXOTIC MATERIALS - \$1.25 additional per hour. SPRAY WORK: - \$0.50 additional per hour.	PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES
INDUSTRIAL PAINTING - \$0.25 additional per hour	Rates Fringes
<pre>[Work on industrial buildings used for</pre>	Painters:\$ 33.68 20.24 SPRAY/SANDBLAST: \$0.50 additional per hour. EXOTIC MATERIALS: \$1.00 additional per hour. HIGH TIME: Over 50 ft above ground or water level \$2.00 additional per hour. 100 to 180 ft above ground or water level \$4.00 additional per hour. Over 180 ft above ground or water level \$6.00 additional per
PAIN0016-005 06/01/2020	hour.
ALPINE, BUTTE, COLUSA, EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Hwy. 395, excluding Honey Lake); MARIN, MODOC, NAPA, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES	PAIN0016-008 01/01/2019 MARIN, NAPA, SOLANO AND SONOMA COUNTIES Rates Fringes SOFT FLOOR LAYER\$ 48.60 27.43 PAIN0169-004 07/01/2020
Rates	MARIN , NAPA & SONOMA COUNTIES; SOLANO COUNTY (west of a line defined as follows: Hwy. 80 corridor beginning at the City of
DRYWALL FINISHER/TAPER\$ 47.38 25.99 	Fairfield, including Travis Air Force Base and Suisun City; going north of Manakas Corner Rd., continue north on Suisun Valley Rd. to the Napa County line; Hwy. 80 corridor south on
ALPINE, AMADOR, BUTTE, COLUSA. EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Highway 395,	Grizzly Island Rd. to the Grizzly Island Management area)
excluding Honey Lake), MODOC, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains),	Rates Fringes GLAZIER\$ 52.17
Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021	County of El Dorado Agreement C-63

* PAIN0567-001 07/01/2020	PAIN0567-010 07/01/2020
EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)	EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)
Rates Fringes	Rates
Painters: Brush and Roller\$ 29.80 13.44 Spray Painter & Paperhanger.\$ 31.29 13.44 PREMIUMS:	Drywall (1) Taper\$ 35.20 14.02 (2) Steeplejack - Taper, over 40 ft with open space below\$ 36.70 14.02
Special Coatings (Brush), and Sandblasting = \$0.50/hr Special Coatings (Spray), and Steeplejack = \$1.00/hr Special Coating Spray Steel = \$1.25/hr Swing Stage = \$2.00/hr *A special coating is a coating that requires the mixing of 2 or more products.	PAIN0767-004 07/01/2020 ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO (Remainder), SUTTER, TEHAMA, TRINITY, YOLO, YUBA
PAIN0567-007 07/01/2020	Rates Fringes
EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the	GLAZIER\$ 40.61 30.76 PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day,
Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains) AND SIERRA COUNTY (east of the Sierra Nevada Mountains)	President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.
Rates Fringes	Employee rquired to wear a body harness shall receive \$1.50 per hour above the basic hourly rate at any elevation.
SOFT FLOOR LAYER\$ 31.01 15.48	PAIN1176-001 07/01/2020
Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021	County of El Dorado Agreement C-64

HIGHWAY IMPROVEMENT	AREA 295: Alpine, Amador,
Rates	Butte, Colusa, El Dorado, Glenn, Lassen, Modoc,
Fringes	Nevada, Placer, Plumas,
11111900	Sacramento, Shasta,
Parking Lot Striping/Highway Marking:	Sierra, Siskiyou, Solano, Sutter, Tehema, Trinity,
GROUP 1\$ 38.48 16.88	Yolo & Yuba Counties\$ 32.70 31.68
GROUP 2\$ 32.71	AREA 355: Marin\$ 36.73
GROUP 3\$ 33.09	AREA 355: Napa & Sonoma Counties\$ 32.70
	31.68
CLASSIFICATIONS	
GROUP 1: Striper: Layout and application of painted traffic	PLAS0300-005 07/01/2017
stripes and marking; hot thermo	Rates
plastic; tape, traffic	Fringes
stripes and markings	3.1
GROUP 2: Gamecourt & Playground	CEMENT MASON/CONCRETE FINISHER\$ 33.49 23.67
Installer	
GROUP 3: Protective Coating, Pavement Sealing	PLUM0038-002 07/01/2020
Sealing	MARIN AND SONOMA COUNTIES
PAIN1237-001 06/01/2020	Rates
PAIN1237-001 00/01/2020	riinges
ALPINE; COLUSA; EL DORADO (west of the	PLUMBER (Plumber,
Sierra Nevada	Steamfitter, Refrigeration
Mountains); GLENN; LASSEN (west of	Fitter)
Highway 395, beginning at	(1) Work on wooden frame
Stacey and including Honey Lake); MODOC;	structures 5 stories or
NEVADA (west of the	less excluding high-rise
Sierra Nevada Mountains); PLACER (west of the Sierra Nevada	<pre>buildings and commercial work such as hospitals,</pre>
Mountains); PLUMAS; SACRAMENTO; SHASTA;	prisons, hotels, schools,
SIERRA (west of the	casinos, wastewater
Sierra Nevada Mountains); SISKIYOU;	treatment plants, and
SUTTER; TEHAMA; TRINITY;	resarch facilities as well
YOLO AND YUBA COUNTIES	as refrigeration
	pipefitting, service and repair work - MARKET
Rates	RECOVERY RATE\$ 64.86
Fringes	43.54 (2) All other work - NEW
SOFT FLOOR LAYER\$ 39.61	CONSTRUCTION RATE\$ 76.30
22.59	45.27
PLAS0300-003 07/01/2018	PLUM0038-006 07/01/2019
Rates Fringes	MARIN & SONOMA COUNTIES
Road Safety Improvements at Various Locations	County of El Dorado

Contract No. 5415, CIP No 72195 May 11, 2021 PLASTERER

Agreement C-65

Rates Fringes Landscape/Irrigation Fitter (Underground/Utility Fitter)\$ 63.04 31.48 PLUM0228-001 01/01/2021 BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY & YUBA COUNTIES Rates Fringes PLUMBER\$ 42.00 35.14	material: \$.75 per hour additional. Work from trusses, temporary staging, unguarded structures 35' from the ground or water: \$.75 per hour additional. Work from swinging scaffolds, boatswains chairs or similar devices: \$.75 per hour additional. PLUM0350-001 08/01/2019 EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake Tahoe area only); (Lake Tahoe area only)
	Rates Fringes
PLUM0343-001 07/01/2020 NAPA AND SOLANO COUNTIES	PLUMBER/PIPEFITTER\$ 45.84
Rates	PLUM0355-001 07/01/2020
PLUMBER/PIPEFITTER Light Commercial\$30.85 20.40 All Other Work\$54.00 38.74 DEFINITION OF LIGHT COMMERICIAL: Work shall include strip shopping	ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES
centers, office buildings, schools and other commercial structures which the total plumbing bid does not exceed Two Hundred and Fifty Thousand (\$250,000) and the total heating and cooling does not exceed Two Hundred Fifty Thousand	Rates Fringes Underground Utility Worker /Landscape Fitter\$ 29.90 16.30
(\$250,000); or Any projects bid in phases shall not qualify unless the total	PLUM0442-003 07/01/2020
project is less than Two Hundred Fifty Thousand (\$250,000) for the plumbing bid; and Two Hundred	AMADOR (South of San Joaquin River) and ALPINE COUNTIES
Fifty Thousand (\$250,000) for the heating and cooling bid. Excluded are	Rates Fringes
hospitals, jails, institutions and industrial projects, regardless size of the project	PLUMBER\$ 45.50 31.89
	PLUM0447-001 07/01/2020
Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021	County of El Dorado Agreement C-66

AMADOR (north of San Joaquin River), EL DORADO (excluding Lake Tahoe area), NEVADA (excluding Lake Tahoe area); PLACER (excluding Lake Tahoe area), SACRAMENTO AND YOLO COUNTIES	ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES
Rates	Rates Fringes
Fringes	SPRINKLER FITTER\$ 40.87
PLUMBER/PIPEFITTER	
Journeyman\$ 54.37 25.75	SHEE0104-006 06/29/2020
Light Commercial Work\$ 36.23 17.72	MARIN, NAPA, SOLANO SONOMA & TRINITY COUNTIES
ROOF0081-006 08/01/2020	Dates
MARIN, NAPA, SOLANO AND SONOMA COUNTIES	Fringes
Rates	Sheet Metal Worker Mechanical Contracts
Fringes	\$200,000 or less\$ 55.92 45.29
Roofer\$ 44.62 19.36	All other work\$ 64.06 46.83
ROOF0081-007 08/01/2020	SHEE0104-009 07/01/2020
ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES	AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER, YOLO AND YUBA COUNTIES
	Rates Fringes
Rates	-
Fringes Roofer\$ 39.73	SHEET METAL WORKER\$ 46.60 40.21
19.11	SHEE0104-010 07/01/2020
SFCA0483-003 01/01/2021	Alpine County
MARIN, NAPA, SOLANO AND SONOMA COUNTIES	Rates Fringes
Rates Fringes	SHEET METAL WORKER\$ 43.50
SPRINKLER FITTER (Fire	
Sprinklers)\$ 67.99 32.85	SHEE0104-011 07/01/2020
SFCA0669-003 01/01/2021	BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER,
Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021	County of El Dorado Agreement C-67

PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES	GROUP 5\$ 32.98 27.86
	FOOTNOTES: Articulated dump truck; Bulk cement
Rate	
Fringes	auger); Dumpcrete truck; Skid truck
11111900	(debris box); Dry
Sheet Metal Worker (Metal	pre-batch concrete mix trucks;
decking and siding only)\$ 44.4	
35.55	Slurry truck: Use dump truck yardage
	rate.
	Heater planer; Asphalt burner;
SHEE0104-014 07/01/2020	Scarifier burner; Industrial
MADINI NADA COLANO CONOMA AND EDINIE	lift truck (mechanical tailgate);
MARIN, NAPA, SOLANO, SONOMA AND TRINIT COUNTIES	Y Utility and clean-up truck: Use appropriate rate for the
COUNTIES	power unit or the
Rate	
Fringes	equipment defilized.
3	
SHEET METAL WORKER (Metal	TRUCK DRIVER CLASSIFICATIONS
Decking and Siding only)\$ 44.4	5
35.55	GROUP 1: Dump trucks, under 6 yds.;
	Single unit flat rack (2-
	axle unit); Nipper truck (when flat
SHEE0104-019 07/01/2020	<pre>rack truck is used appropriate flat rack shall apply);</pre>
BUTTE, GLENN, LASSEN, MODOC, PLUMAS,	Concrete pump truck
SHASTA, SIERRA, SISKIYOU	(when flat rack truck is used
AND TEHAMA COUNTIES	appropriate flat rack shall
	apply); Concrete pump machine; Fork
	lift and lift jitneys;
Rate	
Fringes	fuel person; Snow buggy;
	Steam cleaning; Bus or personhaul
SHEET METAL WORKER	driver; Escort or pilot
Mechanical Jobs \$200,000 & under\$ 35.1	car driver; Pickup truck; Teamster oiler/greaser and/or
35.88	serviceperson; Hook tender (including
Mechanical Jobs over	loading and
\$200,000\$ 46.6	
40.21	attendant (refineries)
	-
	GROUP 2: Dump trucks, 6 yds. and under
TEAM0094-001 07/01/2018	8 yds.; Transit
	mixers, through 10 yds.; Water trucks,
Rate	, , ,
Fringes	Jetting trucks, under 7,000 gals.; Single-unit flat rack
Truck drivers:	(3-axle unit); Highbed heavy duty
GROUP 1\$ 31.6	
27.86	Rubber-tired muck car (not self-
GROUP 2\$ 31.9	
27.86	jumbo; Winch truck and ""A"" frame
GROUP 3\$ 32.2	8 drivers; Combination winch
27.86	truck with hoist; Road oil truck or
GROUP 4\$ 32.6	
27.86	Buggymobile; Ross, Hyster and similar straddle carriers;
	Straudie Califers;
Road Safety Improvements at Various Location	S County of El Dorado

Contract No. 5415, CIP No 72195 May 11, 2021

Agreement C-68 Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 24 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under flat bed pull Heavy duty transport tiller person; Self- propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 25 yds. and under 65 yds.; Water pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbedk Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low bed Heavy Duty Transport over 7 axles

_____ _____

WELDERS - Receive rate prescribed for craft performing

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021

operation to which welding is incidental.

_____ ===============

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave 7500 gals. Trucks towing tilt bed or for Federal Contractors applies to all contracts subject to the trailers; Lowbed heavy duty transport; Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other healthrelated needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

> Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

www.dol.gov/whd/govcontracts.

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage

listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021

determination. The classifications are the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

> Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

> Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an

interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

> Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

> Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"

Road Safety Improvements at Various Locations Contract No. 5415, CIP No 72195 May 11, 2021

COUNTY OF EL DORADO PAYMENT BOND

(Section 9550, Civil Code)

Bond No
WHEREAS, the County of El Dorado, a political subdivision of the State of California, hereafter referred to as "Obligee", has awarded to Contractor
nereafter referred to as "Principal", a Contract for the Work described as follows:
ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS
CONTRACT No. 5415 / CIP No. 72195
WHEREAS, the State of California, acting through its Department of Transportation is hereafter referred to as "Additiona Obligee", both Obligee and Additional Obligee collectively referred to as "Obligees";
AND, WHEREAS, said Principal is required to furnish a bond in connection with said Contract, guaranteeing the faithfu performance thereof:
NOW, THEREFORE, we the undersigned Principal and Surety are held and firmly bound unto the Obligees, in the sum o
\$) to be paid to the Obligees, for which payment we bind ourselves, jointly and severally.
THE CONDITION OF THIS OBLIGATION IS SUCH,
That if said Principal or its Subcontractors shall fail to pay any of the persons named in Civil Code Section 9100, or amounts due under the Unemployment Insurance Code with respect to Work or labor performed by such claimant, or any amounts equired to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Principal and his Subcontractors pursuant to Section 18806 of the Revenue and Taxation Code, with respect to such Work and labor, that he Surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the Surety will pay a reasonable attorney's fee to be fixed by the court.
This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 as to give a right of action to such persons or their assigns in any suit brought upon this bond.
Dated:
Correspondence or Claims relating to this bond should be sent to the Surety at the following address:
PRINCIPAL
SURETY
ATTORNEY-IN-FACT

NOTE: Signatures of those executing for the Principal and for the Surety must be properly acknowledged, and a Power of Attorney attached for the Surety.

NOTARY ACKNOWLEDGMENTS ATTACHED

PRINCIPAL

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California		
State of California		
County of	-	
On	_before me,	,
	(here insert name and title of the officer)
personally appeared		
		······································
who proved to me on the basis of	f satisfactory evidence to be the person(s) whose nam	e(s) is/are
·	t and acknowledged to me that he/she/they executed th	` '
	, and that by his/her/their signature(s) on the instri	
	f which the person(s) acted, executed the instrument.	
I certify under PENALTY OF PERJI	IURY under the laws of the State of California that the	foregoing
paragraph is true and correct.		
WITNESS my hand and official seal.		
•		
Signature		
	(Seal)	

SURETY

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California	
County of	_
On	before me,,
	(here insert name and title of the officer)
personally appeared	
	,
who proved to me on the basis of satisfa	actory evidence to be the person(s) whose name(s) is/are subscribed to
_	ed to me that he/she/they executed the same in his/her/their authorized
	signature(s) on the instrument the person(s), or the entity upon behalf
of which the person(s) acted, executed	the instrument.
I certify under PENALTY OF PERJURY	Y under the laws of the State of California that the foregoing paragraph
is true and correct.	
WITNESS my hand and official seal.	
Signature	
	(Seal)

COUNTY OF EL DORADO PERFORMANCE BOND

	Bond No
KNOW ALL PERSONS BY THESE PRESENTS, that we	
the Contractor in the Contract hereto annexed, as Principal, and	
as Surety, are held firmly bound unto the County of El Dorado, a political sub	division of the State of California, hereinafter called the "Obligee" and the
State of California, acting through its Department of Transportation, here	eafter referred to as "Additional Obligee", both Obligee and Additional
Obligee collectively referred to as "Obligees"	
in the sum of	DOLLARS,
(\$) lawful money of the United	States, for which payment, well and truly to be made, we bind ourselves,
jointly and severally, firmly by these presents.	
Signed, sea	aled and dated:
The condition of the above obligation is such that if said Principal as Contrall of the conditions of said Contract to be performed by him, and shall f and material, other than material, if any, agreed to be furnished by the complete in a good and workmanlike manner, the Work of Contract No. 5 Locations in strict conformity with the terms and conditions set forth in the otherwise this bond shall remain in full force and effect and the said St Contract or otherwise, and pay all costs thereof for the balance due under stipulates and agrees that no change, extension of time, alteration or an thereunder shall in any wise affect its obligation on this bond, and it does or addition to the terms of the Contract or to the Work.	furnish all tools, equipment, apparatus, facilities, transportation, labor Obligees, necessary to perform and complete, and to perform and 415 / CIP No. 72195 for the Road Safety Improvements at Various e Contract hereto annexed, then this obligation shall be null and void; urety will complete the Contract Work under its own supervision, by terms of the Contract, and the said Surety, for value received, hereby ddition to the terms of the Contract or to the Work to be performed hereby waive notice of any such change, extension of time, alteration
In the event suit is brought upon this bond by the Obligees and judgment i such suit, including a reasonable attorney's fee to be fixed by the court.	s recovered, the Surety shall pay all costs incurred by the Obligees in
This guarantee shall insure the Obligees during the Work required by any of the Work against faulty or improper materials or workmanship that may	
No right of action shall accrue under this bond to or for the use of any pers	on other than the Obligees named herein.
Dated:, 20	
Correspondence or Claims relating to this bond should be sent to the Sure	ety at the following address:
	PRINCIPAL
	SURETY
	

NOTE: Signatures of those executing for the Principal and the Surety must be properly acknowledged, and a Power of Attorney attached for the Surety.

NOTARY ACKNOWLEDGMENTS ATTACHED

ATTORNEY-IN-FACT

PRINCIPAL

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California		
County of	_	
On	_ before me,,	
	(here insert name and title of the officer)	
personally appeared		
	,	
·	satisfactory evidence to be the person(s) whose name(s) is/are	
	and acknowledged to me that he/she/they executed the same in	
, ,	and that by his/her/their signature(s) on the instrument the	
person(s), or the entity upon behalf of	which the person(s) acted, executed the instrument.	
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.		
WITNESS my hand and official seal.		
Signature		
	(Seal)	

SURETY

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California	
County of	_
On	before me,
	(here insert name and title of the officer)
personally appeared	
	·
·	factory evidence to be the person(s) whose name(s) is/are subscribed
	lged to me that he/she/they executed the same in his/her/their authorized
behalf of which the person(s) acted, ex	eir signature(s) on the instrument the person(s), or the entity upon executed the instrument.
. , ,	
I certify under PENALTY OF PERJU paragraph is true and correct.	JRY under the laws of the State of California that the foregoing
WITNESS and a finish and	
WITNESS my hand and official seal.	
Signature	
-	(Seal)

THIS IS A SAMPLE OF WHICH DETAILS ALL THE NECESSARY INFORMATION NEEDED FOR A COMPLETE PROPOSAL. PLEASE LOG ONTO QUEST AND COMPLETE ALL ELECTRONIC FORMS UNDER QUEST PROJECT #7600533. PLEASE NOTE THAT SOME FORMS WILL NEED TO BE DOWNLOADED AND RE-UPLOADED WITH ALL THE NECESSARY INFORMATION FILLED OUT. IF YOU ARE NOT UTILIZING SURETY2000, THEN A PDF OF YOUR BIDDERS BOND WILL NEED TO BE UPLOADED AT THE TIME OF BID AND A HARD COPY WILL NEED TO BE DROPPED OF BY END OF BUSINESS DAY ON THE FIRST BUSINESS DAY AFTER THE BID OPENING.

PROPOSAL

(to be submitted with Bidder's Security)

TO: COUNTY OF EL DORADO, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION,

for the construction of the

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS CONTRACT NO. 5415 / CIP NO. 72195

NAME OF BIDDER		
PHYSICAL ADDRESS		
CITY, STATE, ZIP	(Please include even if M	Mailing Address used)
TELEPHONE NO:	AREA CODE ()
FAX NO:	AREA CODE ()
EMAIL ADDRESS		

The Work for which this Proposal is submitted is for the construction in accordance with these Contract Documents (including the payment of not less than the State general prevailing wage rates or Federal minimum wage rates set forth herein), the Project Plans described below, including any addenda thereto, the Contract annexed hereto, and also in accordance with the California Department of Transportation Standard Plans 2018, the Standard Specifications 2018, Revised Standard Specifications, standard drawings from the Design and Improvement Standards Manual of the County of El Dorado, revised March 8, 1994 including Resolutions 199-91 and 58-94 to adopt changes to the Design and Improvement Standards Manual; the Labor Surcharge and Equipment Rental Rates in effect on the date the Work is accomplished, and in accordance with the General Prevailing Wage rates. The Project Plans and Contract Documents for the Work to be done are entitled:

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195
May 11, 2021

County of El Dorado **Proposal** Page P-1

ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS CONTRACT NO. 5415 / CIP NO. 72195

Bids are to be submitted for the entire Work. The amount of the bid for comparison purposes will be the total of all the items.

The Bidder shall set forth for each unit basis item of work, a unit price, and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In case of discrepancy between the item price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc., from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the Department of Transportation's Final Estimate of cost.

If this Proposal is accepted and the undersigned Bidder shall fail to enter into the Contract and furnish the two bonds in the sums required by Civil Code Section 9550 and Public Contract Code Section 20129(b), with surety satisfaction to the County of El Dorado and in accordance with the Special Provisions within ten (10) days, not including Saturdays, Sundays, and legal holidays, of the date of the letter notice from the County of El Dorado that the Contract has been awarded, the County of El Dorado may, at its option, determine that the Bidder has abandoned the Contract, and thereupon this Proposal and the acceptance thereof shall be null and void and the forfeiture of such security accompanying this Proposal shall operate and the same shall be the property of the County of El Dorado.

The undersigned, as Bidder, declares under penalty of perjury under the laws of the State of California that the only persons or parties interested in this Proposal, as principals, are those named herein; that this Proposal is made without collusion with any other person, firm, or corporation; that it has carefully examined the location of the proposed work, the annexed proposed form of Contract, and the Plans therein referred to; and that it proposes, and agrees if this Proposal is accepted, that it will contract with the County of El Dorado, in the form of the copy of the Draft Contract annexed hereto, to provide all necessary machinery, tools, apparatus, and other means of construction, and to do all the work and furnish all the materials specified in the Contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that it will take in full payment therefore the following item prices, to wit:

PROPOSAL PAY ITEMS AND BID PRICE SCHEDULE ROAD SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS CONTRACT NO. 5415 / CIP NO. 72195

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
1	70030	LEAD COMPLIANCE PLAN	LS	1		
2	80050	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1		
3	120090	CONSTRUCTION AREA SIGNS	LS	1		
4	120100	TRAFFIC CONTROL SYSTEM	LS	1		
5	120149A	TEMPORARY PAVEMENT DELINEATION	LS	1		
6	128651A	PORTABLE CHANGEABLE MESSAGE SIGN	LS	1		
7	130100	JOB SITE MANAGEMENT	LS	1		
8	130200	PREPARE WATER POLLUTION CONTROL PROGRAM	LS	1		
9	149001A	PREPARE FUGITIVE DUST PLAN	LS	1		
10	380001A	HIGH-FRICTION SURFACE TREATMENT (HFST)	SQYD	26,730		
11	820840	ROADSIDE SIGN – ONE POST	EA	9		
12	840502A	4" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	37,775		
13	840502B	8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	125		
14	840516	THERMOPLASTIC PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)	SQFT	15		
15	999990	MOBILIZATION	LS	1		
					TOTAL	

⁽F) Final Pay Quantity

(NOTICE: Bidders failure to execute the questionnaires and statements contained in this proposal as required by applicable laws and regulations, or the determinations by County of El Dorado based upon those questionnaires and statements, may prohibit award of the subject Contract to the bidder.)

⁽P) Eligible for Partial Payment

⁽LS) Lump Sum

SUBCONTRACTOR LIST

The Bidder must list the name, address, license number, and DIR number of each subcontractor to whom the Bidder proposes to subcontract portions of the Work as required by the Contract Documents and the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The Bidder must also list the Work portion to be performed by each subcontractor by listing the bid item number, bid item description, and portion of the Work to be performed by the subcontractor in the form of a percentage calculated by dividing the Work to be performed by the subcontractor by the respective bid item amount(s) (not by the total bid price).

Firm Name Address City, State, Zip Code	Phone Fax	License No. DIR No.		Bid Item Number Bid Item Description	Percentage of Each Bid Item Subcontracted
Name	Phone	License No.	No.	Description	
Address					
	Fax	DIR No.			
City, State, Zip Code					
Name	Phone	License No.	No.	Description	
Address					
City, State, Zip Code	Fax	DIR No.			
City, State, Zip Code					
Name	Phone	License No.	No.	Description	
Address					
	Fax	DIR No.			
City, State, Zip Code					
Name	Phone	License No.	No.	Description	
Address					
Other Other Tim Oracle	Fax	DIR No.			
City, State, Zip Code					

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195
May 11, 2021

County of El Dorado **Proposal** Page P-4

(THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

	<u>Has</u>	<u>Has Not</u>
The Bidder		
Proposed Subcontractor(s)		

hereby certifies the above information regarding participation in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, 11246, and 11375, and as supplemented by 41 CFR 60, and that, where required he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the Bidder hereby declares under penalty of perjury under the laws of the State of California that the Bidder has _____, has not _____been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "Bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note:

The Bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Public Contract Code Section 10162 Questionnaire

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes	No	
	 =	

If the answer is yes, explain the circumstances in the following space.

Public Contract Code Section 10232 Statement

In conformance with Public Contract Code Section 10232, the Bidder, hereby states under penalty of perjury under the laws of the State of California, that no more than one final unappealable finding of contempt of court by a Federal Court has been issued against the Bidder within the immediately preceding two year period because of the Bidder's failure to comply with an order of a Federal Court which orders the Bidder to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

NONCOLLUSION AFFIDAVIT

(Title 23 United States Code Section 112 and Public Contract Code Section 7106)

The undersigned declares:				
I am the	of	, the party making the f	oregoing bid.	
organization, or corporation induced or solicited any oth conspired, connived, or agree has not in any manner, directly bid price of the bidder or any other bidder. All statements bid price or any breakdown corporation, partnership, co	n. The bid is genuine a ner bidder to put in a fa eed with any bidder or a ctly or indirectly, sought y other bidder, or to fix a contained in the bid ar in thereof, or the conter ompany, association, or	and not collusive or sham. alse or sham bid. The bidden nyone else to put in a sham be to yagreement, communicat any overhead, profit, or cost ce true. The bidder has not, onts thereof, or divulged info	son, partnership, company, as The bidder has not directly or er has not directly or indirectly bid, or to refrain from bidding. T ion, or conference with anyone element of the bid price, or of the directly or indirectly, submitted ermation or data relative theret or to any member or agent to or entity for such purpose.	indirectly colluded, The bidder to fix the hat of any his or her to, to any
	tnership, or any other e	ntity, hereby represents that	partnership, joint venture, limite he or she has full power to exe	
			he foregoing is true and correc [city],	
NOTE:				
	on 7106. Signing this Pro		e 23 United States Code Section on thereof shall also constitute	
Bidders are cautioned that m	naking a false certificatio	on may subject the certifier to	o criminal prosecution.	

IRAN CONTRACTING ACT CERTIFICATION

(Public Contract Code Section 2200 et seq.)

As required by California Public Contract Code Section 2204, I certify subject to penalty for perjury that: i) I am duly authorized to execute this certification on behalf of Bidder; and ii) the option checked below relating to my status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

	Bidder is not:
	(i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
	(ii) a financial institution that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.
	The County has exempted Bidder from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the County will be unable to obtain the goods and/or services to be provided pursuant to the Agreement.
	The amount of the contract payable to Bidder for the work does not exceed \$1,000,000.
Signed:	
Titled:	
Firm:	
Date:	

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the contract amount, termination of the contract and/or ineligibility to bid on public contracts for three years.

DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION CERTIFICATION, UNITED STATES DEPARTMENT OF TRANSPORTATION(USDOT) 2 CODE OF FEDERAL REGULATIONS (CFR) 1200 FEDERAL AGENCY REGULATIONS FOR GRANTS AND AGREEMENTS AND EXECUTIVE ORDER 12549

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, or manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any	exceptions to thi	s certification,	insert the	exceptions in	the following space.	

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Bidder further agrees by submitting this Proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where any lower tier participant is unable to certify to this statement, it shall attach an explanation to its proposal to the prime contractor.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

NON-LOBBYING CERTIFICATION FOR FEDERAL-AID CONTRACTS

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No federal or state appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal or state agency, a member of the State Legislature or United States Congress, an officer or employee of the Legislature or Congress, or an employee of a Member of the Legislature or Congress in connection with the awarding of any state or federal contract, including this Contract, the making of any federal grant, the making of any state or federal loan, the entering into of any cooperative contract, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative contract.
- (2) If any funds other than federal appropriated funds have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any federal agency, a member of Congress, an officer or employee of Congress or an employee of a member of Congress in connection with this Contract, grant, local, or cooperative contract, the Bidder shall complete and submit Standard Form-LLL, " Disclosure of Lobbying Activities," in accordance with the form instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Bidder also agrees by submitting its bid or Proposal that it shall require that the language of this certification be included in all of its subcontracts which exceed \$100,000 and that all such subcontractors shall certify and disclose accordingly. If the Bidder is awarded this Contract, it shall ensure that all subcontractors submit certifications regarding federal lobbying activities as required by Section 1352, Title 31, United States Code and that all such certifications are made a part of any subcontracts entered into as a result of this Contract.

DISCLOSURE OF LOBBYING ACTIVITIES

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

1. Type of Federal Action: 2. Status of l	Federal 3. Report Type:
a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance 4. Name and Address of Reporting Entity Prime Subawardee	-
Congressional District, if known	Congressional District, if known
6. Federal Department/Agency:	7. Federal Program Name/Description:
	CFDA Number, if applicable
8. Federal Action Number, if known:	9. Award Amount, if known:
10. Name and Address of Lobby Entity (If individual, last name, first name, MI)	11. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI)
(attach Continuation S	Sheet(s) if necessary)
12. Amount of Payment (check all that apply) \$	
officer(s), employee(s), or member(s) contacted, for	
(attach Continuation	on Sheet(s) if necessary)
16. Continuation Sheet(s) attached: Yes	No
17. Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than	Signature: Print Name: Title:
\$100,000 for each such failure.	Telephone No.:Date:
	Authorized for Local Reproduction
Federal Use Only:	Standard Form - LLL

Standard Form LLL Rev. 04-28-06

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime federal recipient at the initiation or receipt of covered federal action or a material change to previous filing pursuant to title 31 U.S.C. Section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with a covered federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered federal action for which lobbying activity is or has been secured to influence, the outcome of a covered federal action.
- 2. Identify the status of the covered federal action.
- 3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered federal action.
- 4. Enter the full name, address, city, state, and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to: subcontracts, subgrants, and contract awards under grants.
- 5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, state, and zip code of the prime federal recipient. Include Congressional District, if known.
- 6. Enter the name of the federal agency making the award or loan commitment. Include at least one organization level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the federal program name or description for the covered federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
- 8. Enter the most appropriate federal identifying number available for the federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant. or loan award number, the application/proposal control number assigned by the federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered federal action where there has been an award or loan commitment by the Federal agency, enter the federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.
- 10. Enter the full name, address, city, state, and zip code of the lobbying entity engaged by the reporting entity identified in Item 4 to influence the covered federal action.
- 11. Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).
- 12. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (Item 4) to the lobbying entity (Item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
- 13. Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
- 14. Check all boxes that apply. If other, specify nature.
- 15. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with federal officials. Identify the federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.
- 16. Check whether or not a continuation sheet(s) is attached.
- 17. The certifying official shall sign and date the form, and print his/her name title and telephone number.

Public reporting burden for this collection of information is estimated to average 30-minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

SF-LLL-Instructions Rev. 06-04

County of El Dorado

Proposal

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OPT OUT OF PAYMENT ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS

You may opt out of the payment adjustments for price index fluctuations as specified in "Payment Adjustments for Price Index Fluctuations" of the Standard Specifications. If you elect to opt out of the provisions of this specification, complete this form and submit it with your bid.

Contract No. 5415	
Bidder Name:	
☐ I opt out of the pay	ment adjustments for price index fluctuations.
Date:	Signature:

Accompanying	this proposal is
,	al to at least ten percent of the amount of the total bid.
·	all persons interested in the forgoing Proposal as principals are as follows:
IMPORTANT I	NOTICE: If the Bidder or other interested person is a corporation, state legal name of corporation and place in, also names of the president, secretary, treasurer, and executive officer thereof; if a partnership, state ership, also names of all individual partners; if Bidder or other interested person is an individual, state first
Licensed in ac	cordance with an act providing for the registration of Contractors,
License No	Classification(s)
ADDENDA:	This Proposal is submitted with respect to the changes to the Contract included in addenda number (s)
	(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Proposal Pay Items and Bid Price Schedules that were received as part of the addenda)
and that the I Practices Act a of Title 2 of the under the laws 23 United Sta Certification; I Certification; the Form LLL): the	are on this Proposal I certify, under penalty of perjury under the laws of the State of California, that the stionnaire and statements of Public Contract Code Sections 10162, 10232, and 10285.1 are true and correct Bidder has complied with the requirements of Sections 4104 of the Subletting and Subcontracting Fair and of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5 of Division 4 of California Code of Regulations). By my signature on this Proposal I further certify, under penalty of perjury of of the State of California and the United States of America, that the Noncollusion Affidavit required by Title tes Code, Section 112 and Public Contract Code Section 7106; and the Equal Employment Opportunity ran Contracting Act Certification, and the Debarment Suspension, Ineligibility and Voluntary Exclusion ne Non-lobbying Certification for Federal-Aid Contracts and the Disclosure of Lobbying Activities (Standard or Price Index Fluctuations, if elected, and the Electronic Files Usage Acknowledgement form, if elected, are ct.
The person or by resolution, regards for sur Dorado.	persons executing this Proposal on behalf of a corporation or partnership shall be prepared to demonstrate article, or otherwise, that such person is or that such persons are appropriately authorized to act in these ch corporation or partnership. Such authority shall be demonstrated to the satisfaction of the County of El
If the signature authorizing sai disregarded as	e is by an agent other than an officer of a corporation or a member of a partnership, a power of attorney d act by the agent on behalf of his principal shall be submitted with the bid forms; otherwise, the bid may be sirregular and unauthorized.
	execution on the signature portion of this Proposal shall constitute an endorsement and execution of those arations and certifications which are part of this Proposal.
Executed this	day of, 20
at	County, State of
	Sign
	Here
	Name and Title of Bidder
	Name of Firm

YEAR

Withholding Exemption Certificate

CALIFORNIA FORM

20[]

(This form can be used to certify exemption from nonresident withholding under California R&TC Section 18662. This form cannot be used for exemption from wage withholding.)

590

File this form with your withholding agent.	Withholding agent's name			
(Please type or print) Vendor/Payee's name	Vandarina	NO'0		N
vendor/Payee's name	Vendor/paye	= oodiai oodaniy na	mber □ FEIN	Note: Failure to furnish your
	☐ SOS no.	☐ California corp. no.	□ FEIN	identification number will
Vendor/Payee's Address (Number and Street)	APT no.	Private Mailbox no.	Vandan/I	make this certificate void. Payee's daytime telephone no.
vendor/Fayee's Address (Number and Street)	AFT IIU.	Frivate Mailbox 110.	()	ayee's daytime telephone no.
City State ZIP Code				
•				
I certify that for the reasons checked below, the entity or individual named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual. Read the following carefully and check the box that applies to the vendor/payee:				
☐ Individuals – Certification of Residency				
I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly inform the withholding agent. See instructions for Form 590, General Information D, for the definition of a resident.				
Corporations: The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State to do business in California. The corporation will withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California, I will promptly inform the withholding agent. See instructions for Form 590, General Information E, for the definition of permanent place of business.				
☐ Partnerships:				
The above-named partnership has a permanent place of business in California at the address shown above or is registered with the California Secretary of State, and is subject to the laws of California. The partnership will file a California tax return and will withhold on foreign and domestic nonresident partners when required. If the partnership ceases to do any of the above, I will promptly inform the withholding agent. Note: For withholding purposes, a Limited Liability Partnership is treated like any other partnership.				
☐ Limited Liability Companies (LLC):				
The above-named LLC has a permanent place of business in California at the address shown above or is registered with the California Secretary of State, and is subject to the laws of California. The LLC will file a California tax return and will withhold on foreign and domestic nonresident members when required. If the LLC ceases to do any of the above, I will promptly inform the withholding agent.				
□ Tax-Exempt Entities: The above-named entity is exempt from tax under California R&TC Section 23701 (insert letter) or Internal Revenue Code Section 501(c) (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly inform the withholding agent. Note: Individuals cannot be tax-exempt entities.				
☐ Insurance Companies, IRAs, or Qualified Pension/Profit Sharing Plans:				
The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.				
California Irrevocable Trusts: At least one trustee of the above-named irrevocable trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly inform the withholding agent.				
☐ Estates – Certification of Residency of Deceased Person: I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.				
CERTIFICATE: Please complete and sign below.				
Under penalties of perjury, I hereby certify that the information provided herein is, to the best of my knowledge, true and correct. If conditions change, I will promptly inform the withholding agent.				
Vendor/Payee's name and title (type or print)				
Vendor/Payee's signature▶	Date			

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021 County of El Dorado **Proposal** Page P-16

Instructions for Form 590

Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

General Information A Purpose

Use Form 590 to certify an exemption from nonresident withholding. Complete and present Form 590 to the withholding agent. The withholding agent will then be relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

Important – This form cannot be used for exemption from wage withholding. Any questions regarding wage withholding should be directed to the California Employment Development Department.

Do not use Form 590 if you are a seller of California real estate. Sellers of California real estate should use Form 593-C, Real Estate Withholding Certificate.

B Law

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on:

- Payments to nonresidents for services rendered in California;
- Distributions of California source income made to domestic nonresident partners and members and allocations of California source income made to foreign partners and members;
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business;
- Payments to nonresidents for royalties for the right to use natural resources located in California;
- Distributions of California source income to nonresident beneficiaries from an estate or trust: and
- Prizes and winnings received by nonresidents for contests in California.

For more information on withholding and waiver requests, get FTB Pub. 1017, Nonresident Withholding Partnership Guidelines, and FTB Pub. 1023, Nonresident Withholding Independent Contractor, Rent and Royalty Guidelines. To get a withholding publication see General Information G.

C Who can Execute this Form

Form 590 can be executed by the entities listed on this form.

Note: In a situation where payment is being made for the services of a performing entity, this form can only be completed by the performing entity or the performing entity's partnership or corporation. It cannot be completed by the performing entity's agent or other third party.

Note: The grantor of a revocable/grantor trust shall be treated as the vendor/payee for withholding purposes. Therefore, if the vendor/payee is a revocable/grantor trust and one or more of the grantors is a nonresident, withhold

ng is required. If all of the grantors of a revocable/grantor trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled "Individuals— Certification of Residency."

D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

Note: Return visits to California that do not total more than 45 days during any taxable year covered by the employment contract are considered temporary.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of

\$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse who is absent from California for an uninterrupted period of at least 546 days to accompany a spouse who is under an employment related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to reform a particular contract of short duration will be considered a nonresident. For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, or call the Franchise Tax Board at (800) 852-5711 or (916) 845-6500 (not toll-free).

E What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California Secretary of State. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

F Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

Note: If the withholding agent has received Form 594, Notice to Withhold Tax at Source, only the performing entity can complete and

sign Form 590 as the vendor/payee. If the performing entity completes and signs Form 590 indicating no withholding requirement, you must send a copy of Form 590 with Form 594 to the FTB

For more information, contact the Withholding Services and Compliance Section. See General Information G.

The vendor/payee must notify the withholding agent if:

- The individual vendor/payee becomes a nonresident:
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California;
- The partnership ceases to have a permanent place of business in California;
- The LLC ceases to have a permanent place of business in California; or
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold. Remit the withholding using Form 592-A, Nonresident Withholding Remittance Statement, and complete Form 592, Nonresident Withholding Annual Return, and Form 592-B, Nonresident Withholding Tax Statement.

G Where to get Publications, Forms, and Additional Information

You can download, view, and print FTB Publications 1017, 1023, 1024, and nonresident withholding forms, as well as other California tax forms and publications not related to nonresident withholding from our Website at:

www.ftb.ca.gov

To have publications or forms mailed to you or to get additional nonresident withholding information, please contact the Withholding Services and Compliance Section.

WITHHOLDING SERVICES AND COMPLIANCE SECTION FRANCHISE TAX BOARD PO BOX 942867 SACRAMENTO CA 94267-0651

Telephone: (888) 792-4900 (916) 845-4900 (not tollfree) FAX: (916) 845-9512

1166) FAX. (910) 645-9512

Assistance for persons with disabilities:

We comply with the Americans with Disabilities Act. Persons with hearing or speech impairments please call TTY/TDD (800) 822-6268.

Asistencia bilingüe en español

Para obtener servicios en español y asistencia para completar su declaración de impuestos/formularios, llame al número de teléfono (anotado arriba) que le corresponde.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195
May 11, 2021

County of El Dorado **Proposal** Page P-17



County of El Dorado

JOE HARN, CPA Auditor- Controller

OFFICE OF AUDITOR- CONTROLLER

BOB TOSCANO Assistant Auditor-Controlleer

360 FAIR LANE PLACERVILLE, CALIFORNIA 95667 Phone: (530) 621-5487 FAX: (530) 295-2535

PAYEE DATA RECORD

(Required in lieu of IRS W-9 when receiving payment from the County of El Dorado) Version: May 414

PAYEE DATA RECORD	INSTRUCTIONS: Com return of the fully complet of El Dorado to prepare Ir Employment Developmer	ted form will preventormation Return	ent delays ns (Forms	s in processing pa	yments. Info	rmation pr	ovided in t	his form wil	l be used	by the	County
	Name (as shown on your	income tax retur	n)								
SS	Business name/Doing bu	siness as/Disrega	arded enti	ty name, if differe	ent from abov	re					
NAME AND ADDRESS	Physical address (numbe	r, street, and apt.	or suite)		Remitt	tance addı	ress (if diffe	erent than p	hysical)		
A D	City, state, zip code				City, s	state, zip c	ode				
	Phone number		Fax r	number (optional)			Email (op	tional)			
_	Check appropriate fede	ral tax classifica	ition			ı					
[첫 E	o Individual / sole proprie	tor o P	artnership	o o Trust / e	state	o Other (see instruc	ctions) ►			
1 - K	 ○ C Corporation 	 S Corporation 	If yo	ou are a corporati	on, do you pr	rovide lega	al or medica	al services	∘ Yes	0 N	٧o
RAL SIFIC NPTI	 Limited liability compan 	y. Enter the tax o	lassificati	on (C=C Corpora	tion, S=S Co	rporation,	P= Partner	rship)			
FEDERAL TAX CLASSIFICATIO N & EXEMPTIONS	NOTE: IF YOU ARE A SI		LLC (DI	SREGARDED EN	NTITY), ENTE	ER THE TA	AX CLASS	SIFICATION	OF THE	OWN	ER
- 0	Exempt payee code (if an	ny) – see instructi	ons	Exemp	otion from FA	TCA repoi	rting code	(if any) – se	e instruc	tions	_
z	Tax Identification numb	er (TIN)									
TAX IDENTIFICATION NUMBER	Enter years TIN in the en	wasanista hay l	f				Soc	ial Security	Number		
X S H	Enter your TIN in the ap proprietor, you must en	iter your SSN. Y	r you are ou may c	an individual or hoose to provid	e your		-		_		
- <u>F</u> <u>5</u> 5	EIN in addition to, but n	ot instead of, th	e SSN. S	ingle member Ll	_Cs			or Idontifica	tion Num	har	
90	(disregarded entities) m Name line.	nust enter the TI	N of the o	owner identified	on the	1	I I	er Identifica	llion Nun	ibei	1
	Name me.						-				
	Check appropriate box										
RESIDENCY STATUS	California resident / exe business in California California nonresident (NOTE: Payments to Calif California that exceed \$1, been approved for reduce performed outside of Calif	a (attach CA Form (see instructions) fornia nonresiden ,500 in a calenda ed withholding by	n 590) its for serv ir year will	vices performed in	n California a nonresident	nd for cert withholdir	ain rents d	erived from	propertion	es loca waiver	ted in or have
ESIDE		ed Franchise Tax									
Œ		ed Franchise Tax	Board ap	proval for reduce	d withholding	(attach a	copy if app	olicable)			-
	California sales tax permi (required only for Californ		endors tha	at charge Californ	ia sales tax)						
	Under penalties of perju			at on ange our on the	ia caice tarij	ı	1 1			1	ı
z	1) the TIN shown on this										
	I am not subject to ba form (if any)	ackup withholding	and 3) i	am a U.S. citizer	or other U.S	s. person a	ina 4) the	FATCA CO	de(s) enti	erea or	i this
\ \delta \	indicating that I am exen	npt from FATCA	reporting	is correct							
Ē	Authorized Payee Repre	esentative's Nan	ne (Type	or Print)			Title				
CERTIFICATION	Signature				Date		Telepi	hone			
8	- Originaturo				Duto		10.00				
	Should my residency st	atus or any other	er inform	ation provided a	bove change	e, I will pr	omptly no	tify Count	y of El D	orado	at the
_	address listed above. Please return completed	d form to:									
l &		1									
5 ∑	Department/office:	Department of	Transpor	tation							
RETURN FORM TO	Department/office: Mailing address:		•	tation acerville, Californi	a 95667						

PAYEE DATA RECORD

FEDERAL TAX CLASSIFICATION

P

A completed Payee Data Record is required for payments to all entities and will be kept on file at the County of El Dorado Auditor-Controller's Office. Payees who do not wish to complete the Payee Data Record may elect to not do business with the County of El Dorado. If the payee does not complete the form and the required payee data is not otherwise provided, payment may be reduced for federal backup withholding, California backup withholding and California nonresident withholding.

Check the applicable federal tax classification. Note that if an LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Individual: Enter the name shown on your income tax return. If the account is in joint names, list first, and then circle, the name of the person or entity whose SSN you entered on the form.

Sole proprietor: Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as" name on the "Business name/Doing business as/Disregarded entity name" line.

Partnership, C Corporation, or S Corporation: Enter the entity's name on the "Name" line and any business, trade, or "doing business as" name on the "Business name/Doing business as/Disregarded entity name" line.

Disregarded entity: Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income should be reported. Check the appropriate box for the U.S. federal tax classification of the person whose name is entered on the "Name" line

(individual/sole proprietor, partnership, C corporation, S corporation, trust/estate).

Limited liability company (LLC): If the person identified on the "Name" line is an LLC, check the "Limited Liability Company" box only and enter the appropriate code for the U.S. federal tax classification.

Other entities: Enter your business name as shown on required U.S. federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade or DBA name on the

"Business name/Doing business as/Disregarded entity name" line.

EXEMPTIONS

Exemptions: If you are exempt from backup withholding and/or FATCA reporting, enter in the exemptions box any code(s) that may apply to you. Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends. Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions. The following codes identify payees that are exempt from backup withholding: 1 – an organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2); 2 – The United States or any of its agencies or instrumentalities; 3 – A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities; 4 – A foreign government or any of its political subdivisions, agencies, or instrumentalities; 5 – A corporation; 6 – A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States; 7 – A futures commission merchant registered with the Commodity Futures Trading Commission; 8 – A real estate investment fund; 9 – An entity registered at all times during the tax year under the Investment Company Act of 1940; 10 – A common trust fund operated by a bank under section 584(a); 11 – A financial institution; 12 – A middleman known in the investment community as a nominee or custodian; 13 – A trust exempt from tax under section 664 or described in section 4947.

Exemption from FATCA reporting: The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37); B—The United States or any of its agencies or instrumentalities; C—A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities; D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Reg. section 1.1472-

1(c)(1)(i); E—A corporation that is a member of the same expanded affiliated group as a corporation described in Reg. section 1.1472-1(c)(1)(i); F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state.

TAX IDENTIFICATIO N NUMBER Enter your tax identification number (TIN) in the appropriate box. If you are a single member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN. The TIN for individuals and sole proprietors is the Social Security Number (SSN). Sole proprietors may provide their EIN in addition to but not instead of a SSN.

The County of El Dorado requires that all parties entering into business transactions that may lead to payment(s) from the County provide their Taxpayer Identification Number (TIN). The TIN is also required by the California Revenue and Taxation Code Section 18646 to facilitate tax compliance enforcement activities and the preparation of Form 1099 and other information returns as required by the Internal Revenue Code Section 6109(a).

RESIDENCY STATUS

Are you a California resident or nonresident?

A **corporation** will be defined as a "resident" if it has a permanent place of business in California or is qualified through the Secretary of State to do business in California. A **partnership** is considered a resident partnership if it has a permanent place of business in California. An **estate** is a resident if the decedent was a California resident at time of death. A **trust** is a resident if at least one trustee is a California resident. For **individuals** and **sole proprietors**, the term "resident" includes every individual who is in California for other than a temporary or transitory purpose and any individual domiciled in California who is absent for a temporary or transitory purpose. Generally, an individual who comes to California for a purpose that will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

Payments to all nonresidents may be subject to withholding. Nonresident payees performing services in California or receiving certain rent, lease, or royalty payments from property (real or personal) located in California will have 7% of their total payments withheld for State income taxes. However, no withholding is required if total payments to the payee are \$1,500 or less for the calendar year or if payment is for product. Nonresidents who have been granted a waiver on payments of California source income from the California Franchise Tax Board must submit a copy of the waiver. For information on Nonresident Withholding, contact the Franchise Tax Board at the numbers listed below:

Withholding Services and Compliance Section: 1-888-792-4900 Email Address: wscs.gen@ftb.ca.gov
For hearing impaired with TTD, call: 1-800-822-6268 Website: www.ftb.ca.gov

California nonresidents charging California sales tax are required to provide their California sales tax number.

CER TIFIC ATIO Provide the name, title, signature, and telephone number of the authorized individual completing this form. Provide the date the form was completed. **NOTE:** You must cross out item 2 in the certification block if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195
May 11, 2021

County of El Dorado **Proposal** Page P-19

EXHIBIT 15-G CONSTRUCTION CONTRACT DBE COMMITMENT

1. Local Age	ency: County of El Dorado		2. Contract DBE Goal: 8%	
3. Project De	escription:			
4. Project Lo	ocation:			
5. Bidder's N	Name: 6. Pri	ime Certified DB	E: 🗖 7. Bid Amount:	
8. Total Dolla	ar Amount for <u>ALL</u> Subcontractors:		9. Total Number of <u>ALL</u> Subcontractors:	
10. Bid Item Number	11. Description of Work, Service, or Materials Supplied	12. DBE Certification Number	13. DBE Contract Information (Must be certified on the date bids are opened)	14. DBE Dollar Amount
Local A	Agency to Complete this Section upon Execution	of Award		
21. Local Ag	pency Contract Number: 5415, CIP No. 72195			\$
22. Federal-	Aid Project Number: HSIPL 5925(171)		15. TOTAL CLAIMED DBE PARTICIPATION	0,4
23. Bid Oper	ning Date: June 4, 2021			%
24. Contract	Award Date:		IMPORTANT: Identify all DBE firms being claimed regardless of tier. Names of the First Tier DBE Sul	
	mount: cy certifies that all DBE certifications are valid and informplete and accurate.	ormation on	and their respective item(s) of work listed above me consistent, where applicable with the names and it work in the "Subcontractor List" submitted with you confirmation of each listed DBE is required.	ust be ems of the
25. Loca	al Agency Representative's Signature 26. D)ate	16. Preparer's Signature 17. Da	te
Brian Fra 27. Loca		621-5311 Phone	18. Preparer's Name 19. Ph	one
	Engineer/Office Engineer Il Agency Representative's Title		20. Preparer's Title	

DISTRIBUTION: 1. Original – Local Agency
2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract. Include additional copy with award package.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654- 3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Road Safety Improvements at Various Locations Contract No. 5415, CIP No. 72195 May 11, 2021

County of El Dorado **Proposal** Page P-20

INSTRUCTIONS – CONSTRUCTION CONTRACT DBE COMMITMENT

ALL BIDDERS:

PLEASE NOTE: This information may be submitted with your bid. If it is not, and you are the apparent low bidder or the second or third low bidder, it must submitted and received as specified in the Special Provisions. Failure to submit the required DBE commitment will be grounds for finding the bid non-responsive.

The form requires specific information regarding the construction contract: Local Agency, Location, Project Description, Total Contract Amount, Bid Date, Bidder's Name, and Contract DBE Goal.

The form has a column for the Description of Work, Service, or Materials Supplied (Box 11). The bid item number and description of work, service, or materials supplied to be provided by DBEs must be provided in this section. Prime contractors shall indicate all work to be performed by DBEs including, if the prime is a DBE, work performed by its own forces, if a DBE. The DBE shall provide a certification number to the Contractor and expiration date. Enter the DBE prime's and subcontractors' certification numbers. The form has a column for the DBE Contact Information (who must be certified on the date bids are opened and include the DBE address and phone number).

The form has a line for Total Dollar Amount for ALL Subcontractors (Line 8). Enter the total dollar amount for all subcontracted contractors (both DBE and Non-DBE) on this line. Do not include the prime contractor information in this count. The Form has a line for Total Number of ALL Subcontractors (Line 9). Enter the total number of all subcontracted contractors (both DBE and Non-DBE). Do not include the prime contractor information in this count.

IMPORTANT: Identify **all** DBE firms participating in the project regardless of tier. Names of the First-Tier DBE Subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "Subcontractor List" submitted with your bid.

There is a column for the DBE participation dollar amount (Box 14). Enter the Total Claimed DBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the Special Provisions. (If 100% of item is not to be performed or furnished by the DBE, describe exact portion of item to be performed or furnished by the DBE.) See Section 2-1.12B to determine how to count the participation of DBE firms.

Exhibit 15-G must be signed and dated by the person bidding. Also list a phone number in the space provided and print the name of the person to contact.

Local agencies should complete the Local Agency Contract Award, Federal-aid Project Number, Federal Share, Contract Award Date fields and verify that all information is complete and accurate before signing and filing.

EXHIBIT 15-H DBE INFORMATION —GOOD FAITH EFFORTS DBE INFORMATION - GOOD FAITH EFFORTS

Federal	-aid Proj	ect No.	Bid Opening Da	ite	
			Disadvantaged Business Enterp that a good faith effort was made.	rise (DBE) goal of 8% for this	s Contract
days fro Exhibit This foo determi	om bid o 15-G: Co rm prote nes that	pening. Proposers and onstruction Contract DB octs the proposer's or I	ng information to document their good bidders are recommended to sub a Commitment indicate that the provider's eligibility for award of the the goal for various reasons, entical error.	mit the following information oposer or bidder has met the se contract if the administeri	even if the DBE goal ng agency
The foll	owing ite	ems are listed in the Sec	tion 2-1.12B(3), please attach ad	ditional sheets as needed:	
A.			publication in which a request fo ach copies of advertisements or p		roject was
		Publications	Dat	es of Advertisement	
B.	and met	thods used for following	notices sent to certified DBEs so up initial solicitations to determin of solicitations, telephone records	e with certainty whether the [
	Na	mes of DBEs Solicited	Date of Initial Solicitation	Follow Up Methods and Da	ates
_					
_					
-					
_					
_					

C.	The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation in order to meet or exceed the DBE contract goal was made available to DBE firms.							
_	Ite	ems of Work	Bidder Normally Performs Item (Y/N)	Breakdown of Items	Amount (\$)	Percentage Of Contract		
- -								
D.	rejection	mes, addresses and n of the DBEs, the firm I), and the price differe	is selected for that v	vork (please attach	n copies of qu			
	Names, the DBE	addresses and phone Es:	numbers of rejected	d DBEs and the rea	asons for the b	oidder's rejection of		
	Names	addresses and phone	numbers of firms se	lected for the work	ahove.			
	riamos,			notice for the work				
E.		(e.g. in advertisemer tion related to the plar						

F.	Efforts (e.g. in advertisements and s lines of credit or insurance, neces services, excluding supplies and ec prime contractor or its affiliate:	ssary equipment, supplies, mat	erials, or related assistance or
G.	The names of agencies, organizat recruiting and using DBE firms (ple received, i.e., lists, Internet page dov	ease attach copies of requests	
	Name of Agency/Organization	Method/Date of Contact	Results
H.	Any additional data to support a necessary):	demonstration of good faith e	efforts (use additional sheets if

NOTE: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.

COUNTY OF EL DORADO BIDDER'S BOND

this form MUST be used

KNOW ALL PEOPLE BY THESE PRESENTS, THAT WE

		as PRINCIPAL , and
California (hereinafter referre OF THE TOTAL BID PRICE work described below, for the made to the Obligee, we the	ly bound unto the County of El Dorado, a d to as "Obligee"), in the penal sum of TEN of the Principal above named, submitted by payment of which sum in lawful money of the Principal and Surety bind ourselves, our hally, firmly by these presents. In no case shall	(10) PERCENT OF THE AMOUNT said Principal to the Obligee for the ne United States, well and truly to be neirs, executors, administrators and
TEN PER	CENT (10%) OF THE AMOUNT OF THE TO	TAL BID PRICE
THE CONDITION OF THIS O	BLIGATION IS SUCH, THAT:	
WHEREAS, the Principal ha construction specifically desc County, California, for the cor	s submitted the above-mentioned Bid to the cribed as follows, for which bids are to be astruction of the	e Obligee, as aforesaid, for certair e opened at Placerville, El Dorado
ROA	D SAFETY IMPROVEMENT AT VARIOUS L CONTRACT No. 5415 / CIP No. 7219	
required under the Contract D a written contract, in the preso to guarantee faithful performa	aforesaid Principal is awarded the Contrac locuments, after the prescribed forms are pre cribed form, in accordance with the Bid, and f ance and the other to guarantee payment for be null and void; otherwise, it shall remain in	esented to it for signature, enters into files two bonds with the Obligee, one r labor and materials, as required by
	oon this bond by the Obligee and judgment is in such suit, including a reasonable attorney'	
IN WITNESS WHEREOF, we	have set our hands and seals on this	day of 20
Bond No		
(seal)		Principal
(seal)		Surety
Address:		·
(NOTE: Cinnetune of these	avecution for the County shall be successible	

(NOTE: Signature of those executing for the Surety shall be properly acknowledged, and accompanied by a Certificate of Acknowledgment.)

SURETY

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California	
County of	
On before n	ne,,
	(here insert name and title of the officer)
personally appeared	
	·
·	of satisfactory evidence to be the person(s) whose name(s) is/are
	nt and acknowledged to me that he/she/they executed the same in
	s), and that by his/her/their signature(s) on the instrument the f of which the person(s) acted, executed the instrument.
person(s), or the entity upon behan	of which the person(s) acted, executed the institution.
I certify under PENALTY OF PER	RJURY under the laws of the State of California that the foregoing
paragraph is true and correct.	
WITNESS my hand and official sea	I.
,	
Signature	
•	
	(Seal)

PROPOSED ROAD SAFETY COUNTERMEASURES AT VARIOUS LOCATIONS INDEX 1 — SOUTH SHINGLE RD AT SILVER OAKS LN SEE SHT 2 2 — SOUTH SHINGLE RD AT FERNWOOD DR SEE SHT 3 — CEDAR RAVINE RD AT ELYSIAN WAY SEE SHT 4 - FORNI RD AT IVY TRAIL SEE SHT 5 - SLY PARK RD AT MAYFLOWER RD LAKE TAHOE - FORNI RD AT WAMEGO RD SEE SHT 7 - GREENSTONE RD AT GREENSTONE CUTOFF SEE SHT 8 GEORGE- BEATTY DR AT ALEXANDRA DR SEE SHT 9 - MEDER RD AT RESLER WAY SEE SHT 10 - BUCKS BAR RD AT PALACE LN COOL UNION VALLEY - CAMERON PARK DR AT HACIENDA RD RESERVOIR SEE SHT 12 - CEDAR RAVINE RD AT CAMP NAUVOO RD SEE SHT 13 — CAMBRIDGE RD AT KNOLLWOOD DR SEE SHT 14 THRU SHT 16 POLLOCKPINES — SALMON FALLS RD AT PERSIA LN SEE SHT 17 PLACERVILLE - MOTHER LODE DR AT RIDGE DR SEE SHT 18 **JENKINSON** LAKE DIAMOND SPRINGS SOMERSET MT AUKUM EL DORADO COUNTY PROJECT LOCATION NTS COUNTY OF EL DORADO OF DEPARTMENT OF TRANSPORTATION

LOCATION 1 SOUTH SHINGLE RD AT SILVER OAKS LN







To the second

LOCATION 2 SOUTH SHINGLE RD AT FERNWOOD DR













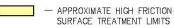




COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION





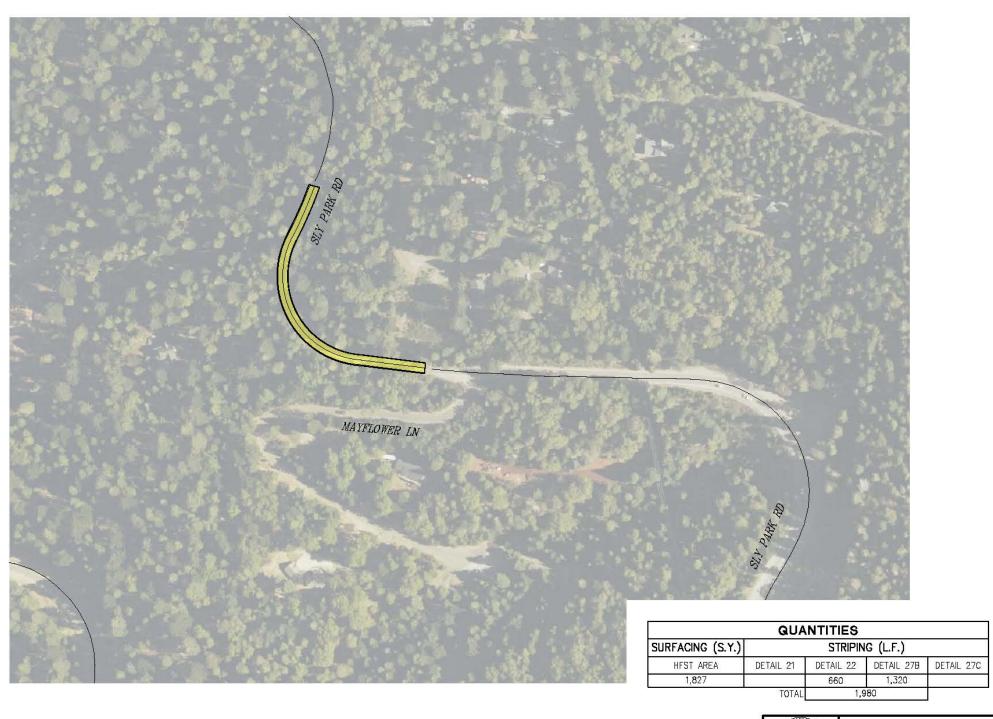




COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

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LOCATION 5 SLY PARK RD AT MAYFLOWER RD

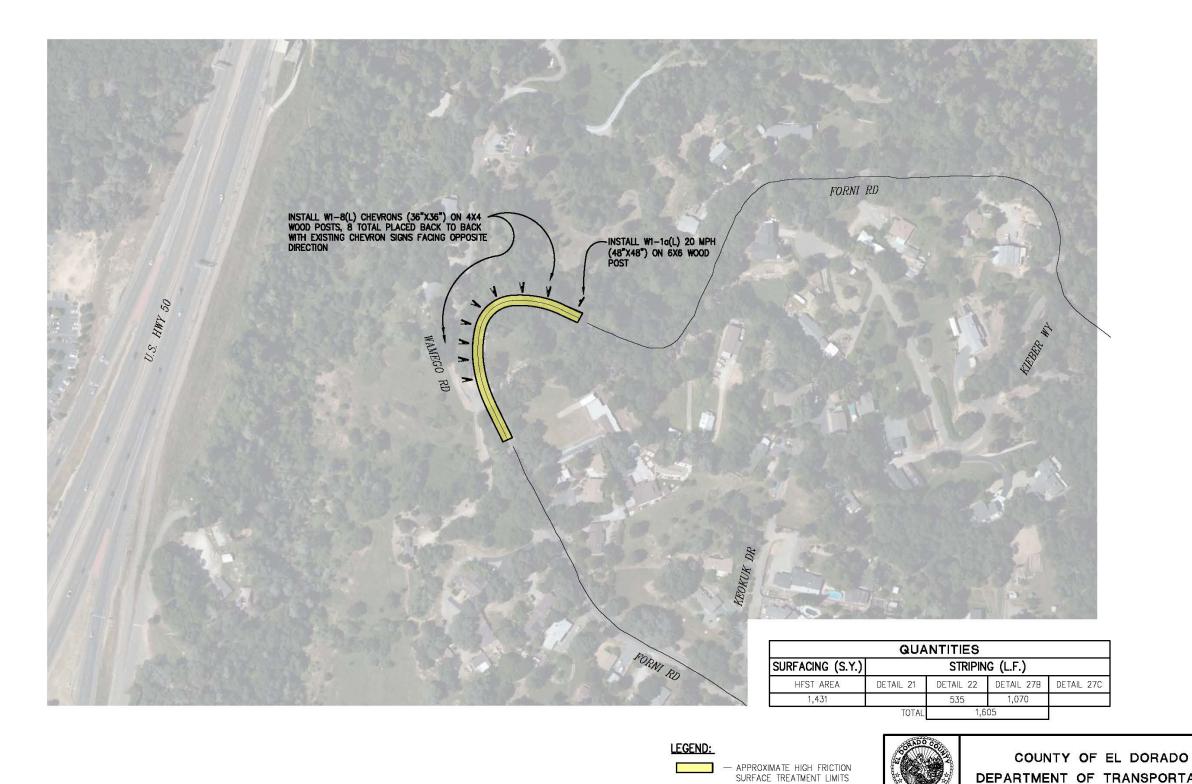








LOCATION 6 FORNI RD AT WAMEGO RD



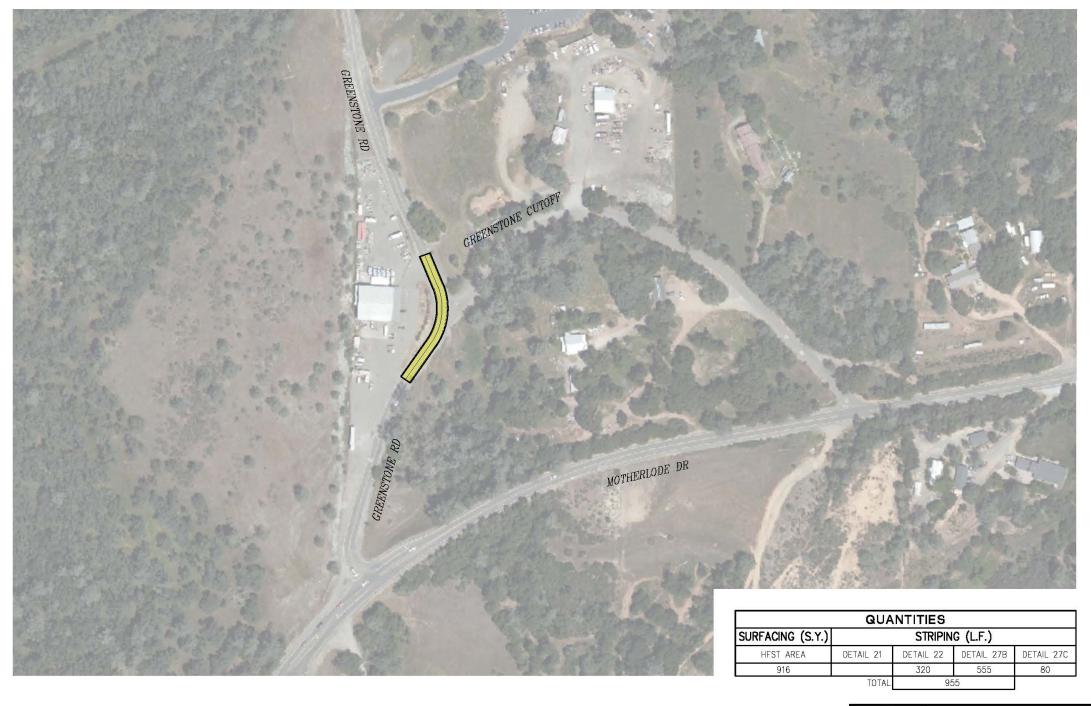
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=100"

7

OF

LOCATION 7 GREENSTONE RD AT GREENSTONE CUTOFF





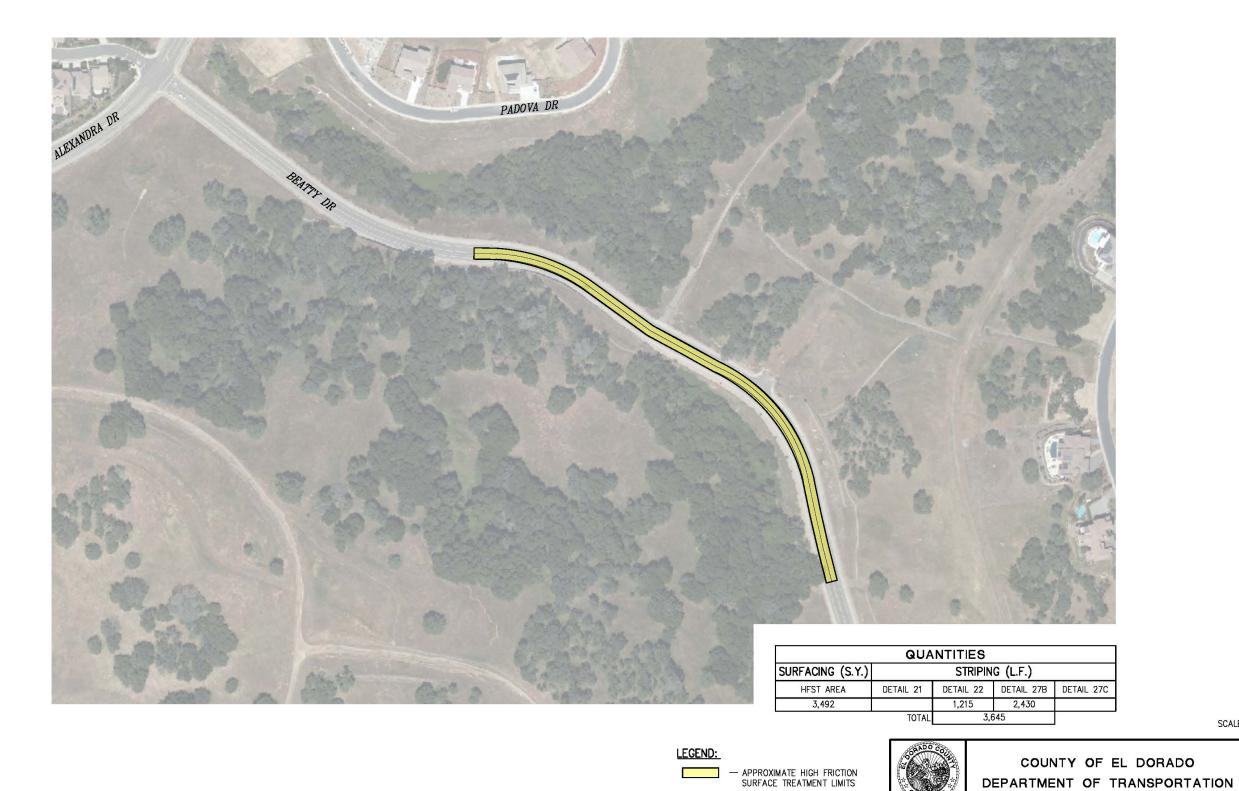




COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

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LOCATION 8 BEATTY DR AT ALEXANDRA DR



SCALE: 1"=100'

9

OF









LOCATION 10 BUCKS BAR RD AT PALACE LN



QUANTITIES							
SURFACING (S.Y.)	S.Y.) STRIPING (L.F.)						
HFST AREA	DETAIL 21	DETAIL 22	DETAIL 27B	DETAIL 27C			
1,492		520	1,035				
	TOTAL	1,5	55				



11

18





LOCATION 11 CAMERON PARK DR TO HACIENDA RD



QUANTITIES							
SURFACING (S.Y.)		STRIPIN	G (L.F.)		MARKING (S.F.)		
HFST AREA	DETAIL 21	DETAIL 22	DETAIL 27B	DETAIL 38	TYPE IV ARROW		
2,832		1,325	1,675	125	15		
	TOTAL		3,125				

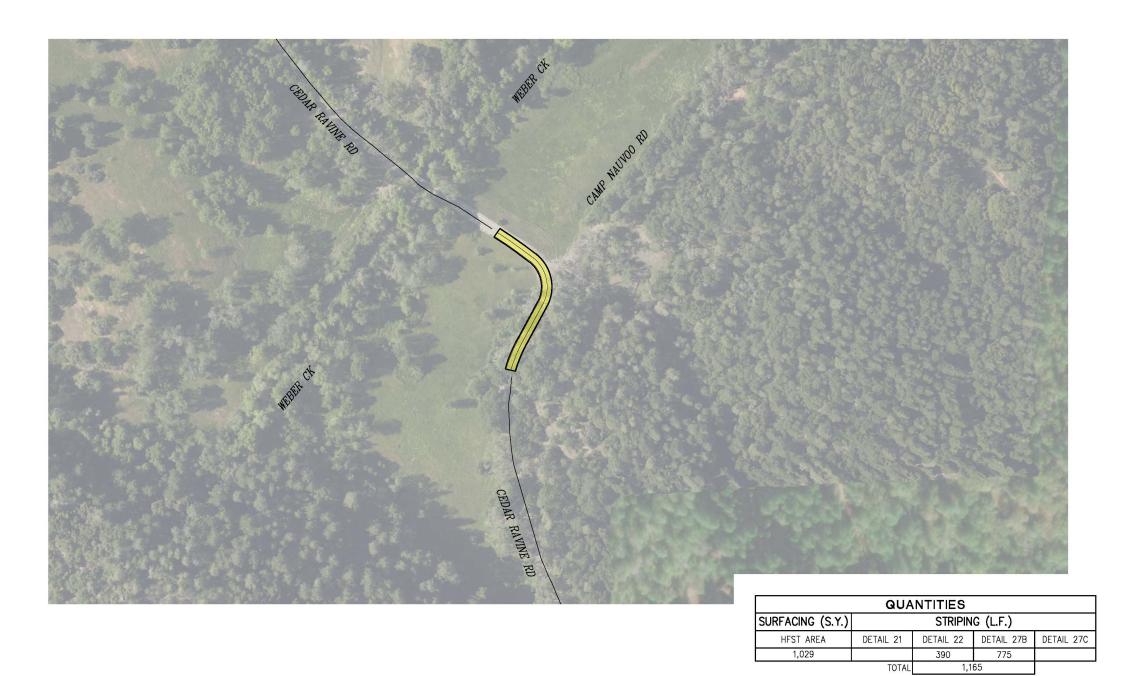








LOCATION 12 CEDAR RAVINE RD AT CAMP NAUVOO RD



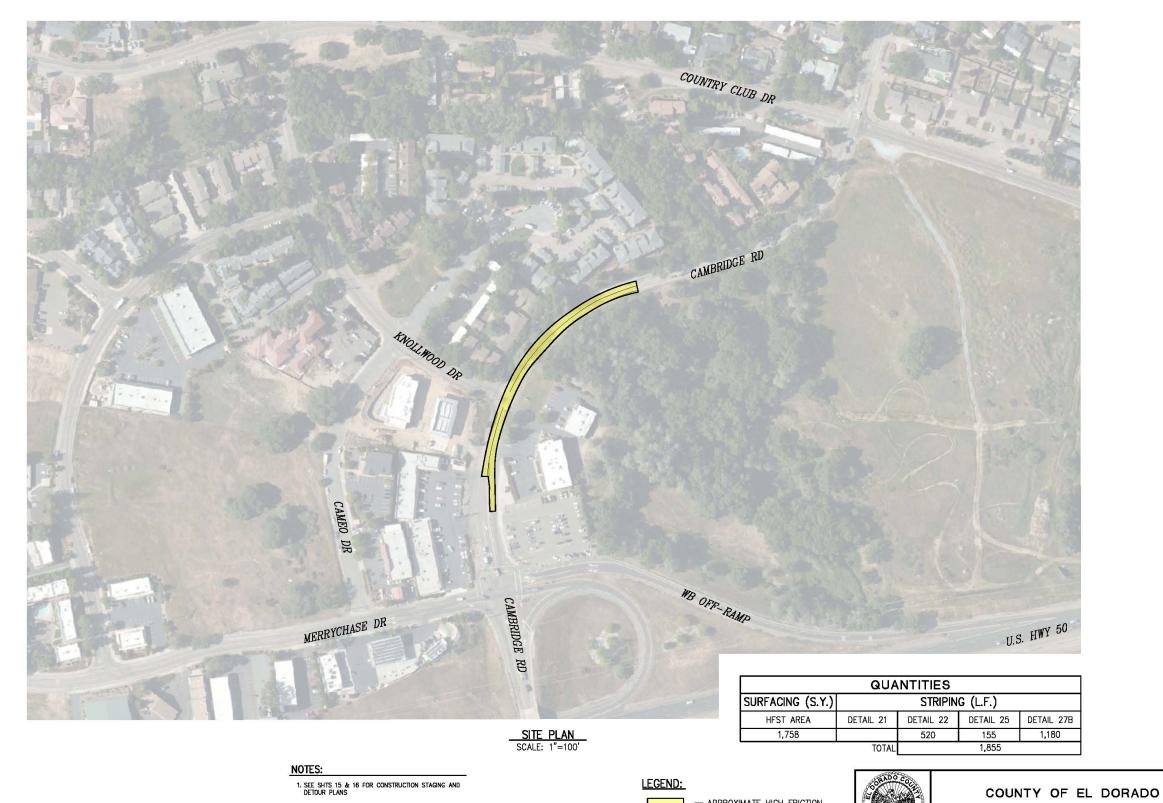


LEGEND:





LOCATION 13 CAMBRIDGE RD AT KNOLLWOOD DR



— APPROXIMATE HIGH FRICTION SURFACE TREATMENT LIMITS

OR REDUCED PLANS | , | , | , |

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DEPARTMENT OF TRANSPORTATION

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STAGE 1 DETOUR PLAN
SCALE: 1"=200'

W20-2 "DETOUR AHEAD"

STAGE 1 NOTES

STAGE 1 CONSTRUCTION WILL INCLUDE THE NORTHBOUND LANES OF CAMBRIDGE RD, AND WILL REQUIRE THE FOLLOWING DETOUR ELEMENTS:

- RIGHT TURN FROM WESTBOUND U.S. HWY 50 OFF-RAMP TO CAMBRIDGE RD (NORTHBOUND) WILL BE CLOSED.
- 2. LEFT TURN FROM KNOLLWOOD DR TO NORTHBOUND CAMBRIDGE RD WILL BE CLOSED. RIGHT TURN WILL BE PERMITTED.
- 3. DETOUR WILL BE WEST ON MERRYCHASE DR TO GREENWOOD LN, THEN RIGHT ON KNOLLWOOD DR TO COUNTRY CLUB DR.
- 4. LOCATIONS OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. FINAL LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- 6. SUBMIT TRAFFIC CONTROL PLANS TO THE ENGINEER FOR REVIEW AND APPROVAL IN ACCORDANCE WITH THE SPECIAL PROVISIONS WHENEVER CONTRACTOR'S OPERATIONS REQUIRE MODIFICATIONS TO THE TRAFFIC CONTROL PLANS.

LEGEND:

APPROXIMATE STAGE 1 HIGH FRICTION SURFACE TREATMENT LIMITS



 PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

TRAFFIC CONES

- CONSTRUCTION SIGN



CMS: LEFTT TURN TO CAMBRIDGE RD — CLOSED -BARRICADE FOR SOUTHBOUND LANE (NORTHBOUND TO REMAIN OPEN) KNOLLWOOD DR CLOSED, PLACE BARRICADE JUST EAST OF GAS STATION ENTRANCE

STAGE 2 DETOUR PLAN SCALE: 1"=200'

STAGE 2 NOTES:

STAGE 2 CONSTRUCTION WILL INCLUDE THE SOUTHBOUND LANES OF CAMBRIDGE RD, AND WILL REQUIRE THE FOLLOWING DETOUR ELEMENTS:

- SOUTHBOUND CAMBRIDGE RD WILL BE CLOSED AT COUNTRY CLUB DR. DETOUR WILL BE SOUTH ON KNOLLWOOD DR TO TO GREENWOOD LN, THEN LEFT ON MERRYCHASE DR TO CAMBRIDGE RD.
- 2. CAMBRIDGE RD NORTHBOUND WILL REMAIN OPEN. LEFT TURN TO KNOLLWOOD DR WILL BE CLOSED.
- 3. LOCATIONS OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. FINAL LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SUBMIT TRAFFIC CONTROL PLANS TO THE ENGINEER FOR REVIEW AND APPROVAL IN ACCORDANCE WITH THE SPECIAL PROVISIONS WHENEVER CONTRACTOR'S OPERATIONS REQUIRE MODIFICATIONS TO THE TRAFFIC CONTROL PLANS.

LEGEND:



APPROXIMATE STAGE 1 HIGH FRICTION SURFACE TREATMENT LIMITS



— PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)



— CHANNELIZER DRUMS



- CONSTRUCTION SIGN



LOCATION 14 SALMON FALLS RD AT PERSIA LN



QUANTITIES							
SURFACING (S.Y.) STRIPING (L.F.)							
HFST AREA	DETAIL 21	DETAIL 22	DETAIL 27B	DETAIL 27C			
3,182		1,085	2,155				
	TOTAL	3,2	40				









LOCATION 15 MOTHER LODE DR AT RIDGE DR











COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

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